East Linda Specific Plan

Yuba County, California

May 14, 1990

EAST LINDA SPECIFIC PLAN

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Table of Contents

List of Figures

List of Tables

1. INTRODUCTION AND PROJECT SETTING

The East Linda Specific Plan provides for the orderly development of a residential community consisting of single family and multi-family residences, neighborhood-serving commercial uses, schools and parks. The Plan includes comprehensive circulation and drainage systems, recommendations for financing of infrastructure improvements, and implementation measures to carry out and achieve Plan goals and objectives. It is the primary purpose of this Specific Plan to facilitate the development of the East Linda area as a quality residential community to serve the future growth needs of Yuba County.

1.1 The Specific Plan Area

The East Linda Specific Plan area, encompassing approximately 1,760 acres, is located east of the unincorporated community of Linda, approximately three miles southeast of Marysville (Regional Location Map, Figure 1-1). It is accessible from State Highways 70 and 65, and is approximately 40 miles north of downtown Sacramento. The Linda community, along with the neighboring community of Olivehurst to the south, comprise the largest unincorporated area of population in Yuba County, and offer the greatest

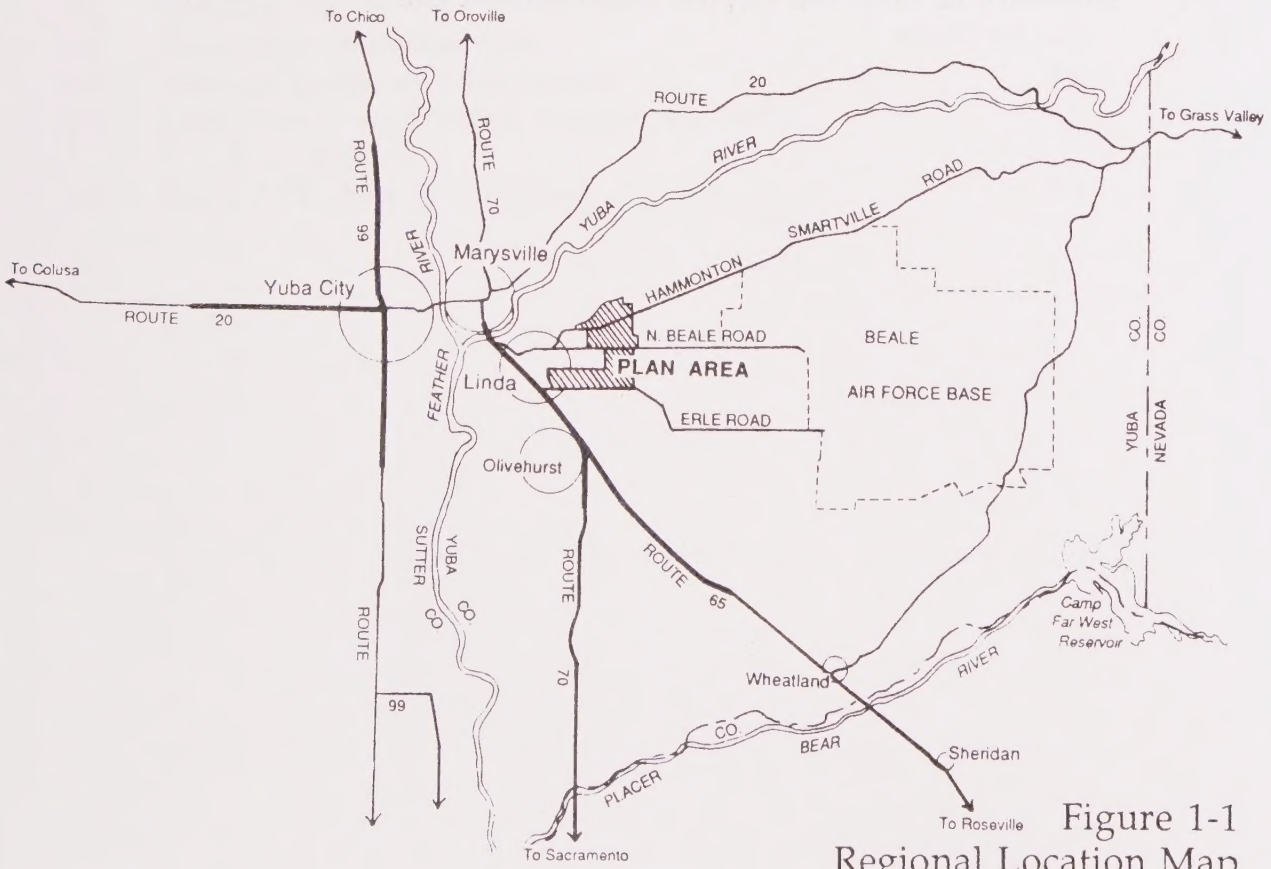


Figure 1-1
Regional Location Map

potential for urban expansion in the County. Unfortunately, both Linda and Olivehurst have been traditionally lacking in commercial and retail services, and are subject to periodic flooding. A combination of these factors and a relatively weak local economy have resulted in a poor overall community image, characterized by economic depression and limited opportunities.

1.2 Purpose and Content

The County of Yuba has desired to master plan the area for some time and, accordingly, the Board of Supervisors allocated funding for the preparation of a Specific Plan for East Linda in 1986. Due to the disastrous February 1986 flooding, however, funding for the Specific Plan was reallocated to assist the flood victims. The Board of Supervisors has rebudgeted funds for preparation of this Plan for the 1988/89 fiscal year. It is anticipated that expansion of the employment base in the Yuba County Industrial Park and in several areas to the south, including north Sacramento County and the South Placer region, along with potential expansion of the mission at Beale Air Force Base, will provide an impetus for growth in the housing supply and commercial and service activities within East Linda.

The purpose of the East Linda Specific Plan is to facilitate orderly growth in the area. It is anticipated that a comprehensive plan that provides a reasonable mix of land uses, good circulation pattern, adequate public services, appropriate financing mechanisms and solid implementation measures will create an environment that will appeal to home builders and home buyers. The result of a good planning effort will be the creation of a strong economic development opportunity, and an attractive community that will be an asset to Yuba County.

The East Linda Specific Plan combines the elements of a General Plan, zoning ordinance, sign ordinance, and capital improvement program in a single package tailored to the particular area. The Plan is intended to provide for the orderly and systematic development of the East Linda area in a manner consistent with the policies of the County of Yuba and the characteristics and limitations of the land. All individual development projects within the Plan area, except those specifically excluded, are subject to the goals, policies and guidelines set forth in this Specific Plan.

The Specific Plan document is composed of several sections, or elements, with related graphics and exhibits. Each of these sections addresses a specific subject area, such as housing or circulation. The emphasis found in each element is described in the following summary.

Section 1. Introduction and Project Setting

This section provides an overview of the structure and concept of the Specific Plan, and a description of the environmental and geographical factors that influence the land use, public facilities, and circulation proposed in the Plan.

Section 2. Land Use Element

The Land Use Element describes the basic concept and purpose of the land uses proposed in the plan area. The description is summarized in the Land Use Summary (Table 2-1), and illustrated by the Specific Plan Land Use Map (Figure 2-1). The Element addresses the issue of housing density and the land use policies that will guide the configuration of neighborhoods.

Section 3. Housing Element

The Housing Element addresses the concern of providing a housing mix that will meet the needs of the future work force and residents of the Specific Plan area. The Element describes the general need for housing based on population growth as well as growth in the local and regional work force.

Section 4. Circulation Element

The Circulation Element describes the circulation facilities that are anticipated in the Plan area on the basis of traffic projections. These include the major arterial system, the secondary collector system, and the pedestrian and bicycle system proposed in the Plan. Specific policies for the implementation of Transportation Systems Management and other trip reduction methods are described in the Element. The relationship of land use to the circulation system and the effect on trip reduction and air quality is addressed in this Element.

Section 5. Open Space and Conservation Element

The Open Space and Conservation Element describes the natural features in the Plan area, and the manner in which they are protected and incorporated into the proposed urban pattern. In addition, the Element addresses the management of broader community resources, such as air quality, water quality, and the conservation of potable water and energy.

Section 6. Public Facilities and Services Element

The Public Facilities and Services Element describes the infrastructure elements, utilities, schools, parks, fire stations, libraries, and other facilities and services required to serve the proposed residential population. Drainage facilities are addressed in this section of the Plan although the existing

drainage conditions and the natural floodways are addressed in the Open Space and Conservation Element.

Section 7. Implementation Element

The Implementation Element describes public and private land use regulations, proposed methods of maintaining certain public and private areas, proposed infrastructure phasing and a description of proposed public facility and infrastructure financing mechanisms.

Section 8. Urban Design Element

The Urban Design Element will guide specific development within the Plan area and, thus, will establish the distinctive features that will come to be identified with the East Linda community. The Element addresses landscaping in both public and private areas, the general configuration and special features of the building design, signage, and the interface between land uses.

Secion 9. Noise Element

The Noise Element describes the major noise sources that will affect future residents of the East Linda community and establishes policies to ensure that new development within the Plan area are properly designed to protect residents from noise impacts of roadways, railroads and Beale Air Force Base.

1.3 Enabling Legislation

The contents of a specific plan document and the approval process are described in Article 8, Sections 65450 through 65457 of Title 7, Planning and Land Use Law, California Government Code. This statute mandates that the specific plan shall include certain statements, programs, descriptions and diagrams, and that it shall be prepared, adopted and amended in the same manner as a general plan. The specific plan shall also be consistent with the adopted general plan of the jurisdiction in which the plan area is located. The statute further states that all subdivision and development, all public works projects, and all zoning regulations must be consistent with the specific plan.

1.4 Specific Plan Setting

The East Linda Specific Plan area consists of approximately 1,760 acres of land located east of and adjacent to the urbanized area of Linda, an unincorporated community three miles southeast of Marysville. The Plan area is bounded by the Linda Levee on the north (separating the area from the Yuba River flood plain), Erle Road on the south, Yuba College and the urbanized area of Linda on the west, and a line generally 1,500 feet east of Griffith Avenue on the east.

Figure 1-2
Local Area Map

Although substantially undeveloped, the Plan area does contain a scattered mix of residential uses, including two apartment complexes, two mobile home parks, and 180 single-family dwellings and mobile homes on individual lots. The Plan area also contains an old tavern and a Jehovah's Witness Kingdom Hall. The remainder of the Plan area is mostly pasture land, with a few small orchards located at the east end. Most of the Plan area (79%) has been zoned "Planning Reserve" since 1982; the northwest portion is zoned at various residential densities, with a small strip of commercial along North Beale Road.

The existing Linda community is bisected by Highway 70 and both the Southern Pacific and Union Pacific Railroads, into two subareas known unofficially as West and East Linda. Linda is largely a residential community with limited industrial and commercial development. In fact, there are significantly fewer commercial and industrial uses in Linda than would be expected for a city of 12,000 inhabitants. West Linda, generally located south and west of Highway 70 and north of the Yuba County Airport, contains 4,700 residents as of October 1988, according to SACOG. East Linda, of which the East Linda Specific Plan is a part, contains approximately 7,270 residents. There are roughly 980 residents within the Plan area.

East Linda serves as the "gateway" to Beale Air Force Base, located about six miles east via North Beale Road and Erle Road. Freeway connections of these arterials to Highway 70 provide good access to the area, and the potential for a Highway 70 Bypass route through the Specific Plan area provides future opportunity for additional access and significant commercial use. Despite the relatively undeveloped character of East Linda, it is the site of the Yuba Community College campus, and was, prior to the 1986 flood, the location of one of the more significant retail centers in the greater Yuba-Sutter region.

1.4.1 Surrounding Land Uses

The East Linda Specific Plan provides for the extension of development east and south of the urbanized area of Linda. To the west is a mix of mostly single-family residential neighborhoods, the majority of which were constructed between 1945 and 1980, and the Yuba College campus, which actually sits at the "heart" of what will become the community of East Linda at buildout of the Specific Plan. Along North Beale Road to the west are various strip commercial uses including restaurants, service stations, auto repair, a building supply store, laundromat and other assorted retail stores. To the northwest lies the Peach Tree Golf and Country Club, and to the southwest is Highway 70. Undeveloped agricultural and pasture lands lie to the south and east.

1.4.2 Existing and Previously Approved Land Use Within the Specific Plan

The East Linda Specific Plan area encompasses a number of residential developments that existed prior to redesignation of the Plan area in 1988, or were approved for development prior to that time (Figure 1-3). Development and construction of new projects within the Plan area is contingent upon Specific Plan approval and execution of development agreements. However, those properties in the Plan area which are already developed are exempt from the provisions of this Specific Plan, and those properties that have already received County approval or were in the development application review process may have vested rights by commencing substantial construction prior to adoption of the Specific Plan.

Among the existing residential developments within the East Linda Specific Plan area are two apartment complexes, Alberta Gardens and College View Apartments, and two mobile home parks, Castlewood and Casa Mia. The two apartment complexes, located on the north side of North Beale Road on either side of Alberta Avenue, contain a total of 136 low-income units. Castlewood Mobile Home Park, located on Griffith Avenue just north of North Beale Road, contains 57 units at present but will have 89 when all the spaces are occupied. Casa Mia, located on the north side of Hammonton-Smartville Road in the northwest corner of the Specific Plan area, contains 84 units. There are also approximately 180 single-family dwellings and mobile homes located on individual lots, some of which are small "ranchettes" of two to five acres. A small subdivision of ten semi-custom homes on 2.3 acre lots situated along Lago Road, just east of Griffith Avenue, was completed in 1987.

In addition to the existing development, there is one sizable single-family subdivision proposed for a 35-acre site across North Beale Road from Yuba College. The project, known as the College View subdivision, is proposed to contain 152 homes in the first phase, with more single-family homes, apartments and approximately 3.6 acres of commercial along North Beale Road to follow. The project was approved prior to designation of the East Linda Specific Plan area, and initial site work began in Spring 1989. These residential developments are shown in Figure 1-3, Existing Development Within the Specific Plan.

1.4.3 Infrastructure and Public Services Availability

Although mostly undeveloped, portions of the East Linda Specific Plan area are presently served by water and sewer services, provided by the Linda County Water District. The entire water supply is derived from groundwater sources, then delivered to individual homes and businesses. A number of property owners along Griffith Avenue at the eastern end of the Plan area have their own wells, as do Yuba Community College and Castlewood Mobile

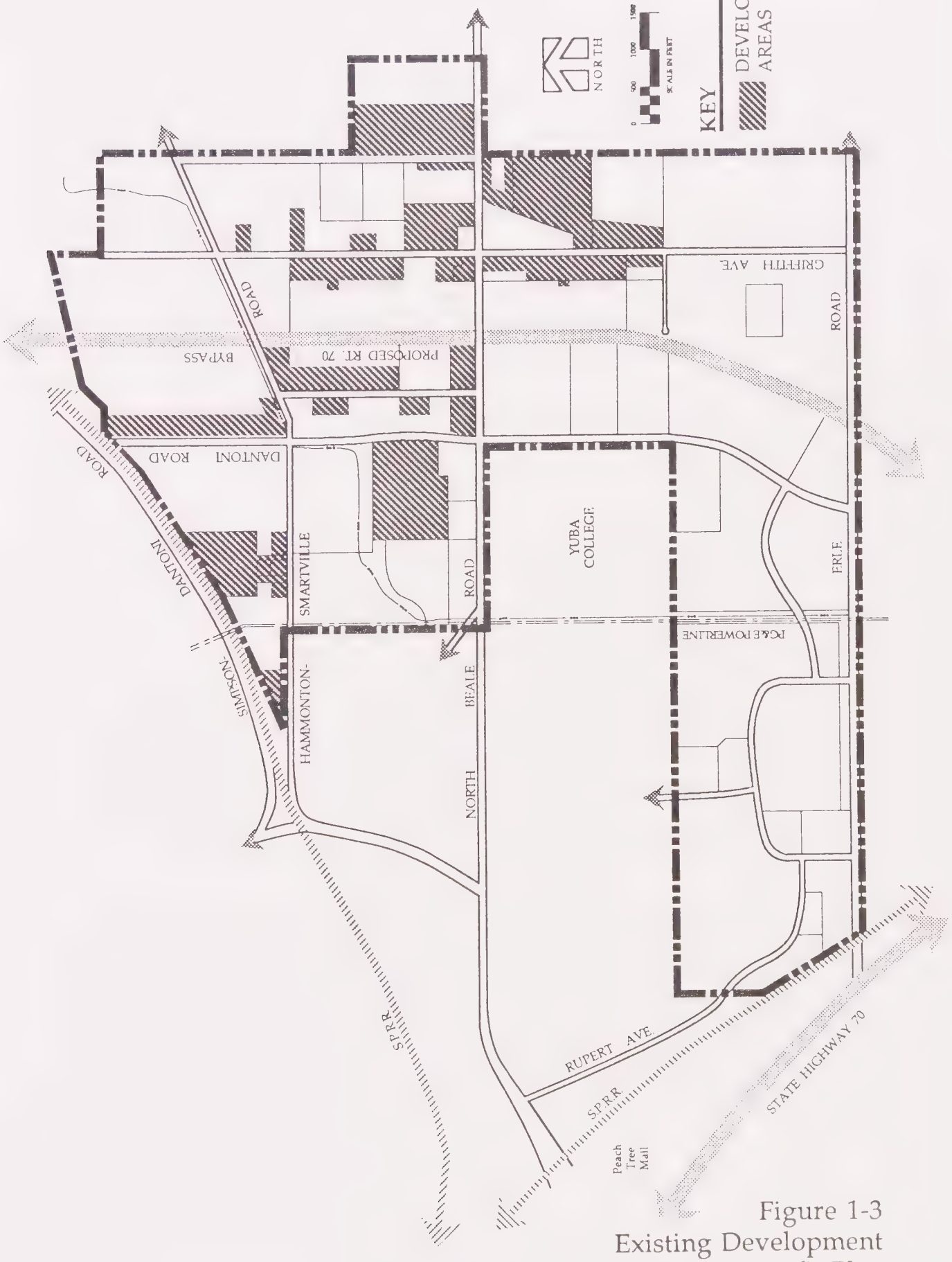


Figure 1-3
Existing Development
Within the Specific Plan

Home Park. Yuba College may close its wells and connect to the District in the near future. The District has recently purchased a new 10-acre well site near Dantoni Road to increase water supplies to serve anticipated growth over the next several years, although most of the District's efforts have been directed to improving the overall water quality. The longer term growth resulting from build-out of the Specific Plan area would require the drilling of two or more new wells to increase water supplies.

The District has been providing sewer services to the Linda Community since 1960. The District boundary includes several sparsely developed areas in East Linda, currently designated "Planning Reserve" in the County General Plan, that have been identified for future service. The District wastewater treatment plant, located west of the Yuba County Airport, has enough spreading ground capacity to accommodate three times the current population of Linda, although the treatment plant would have to be expanded. As growth occurs, the sewer lines leading to the treatment plant would also require expansion to carry the increased volume. A more detailed discussion of the water and sewer systems is presented in the public Facilities and Services Element, Section 6.

With regard to circulation, many of the major roadways are in place, though most of them will require widening and/or sidewalk, curb and gutter improvements. North Beale Road is presently improved to its design width along a portion of its length through the Plan area, although it will require curb, gutter and sidewalks along currently undeveloped frontages. Erle Road has recently been regraded and resurfaced, but will require widening and sidewalk, curb and gutter improvements as growth occurs. The proposed State Highway 70 bypass has received preliminary approval, and has been incorporated into the Circulation Element of the Yuba County General Plan, but the final design and construction funding have not been approved. The future alignment of the bypass is included in the East Linda Specific Plan and land use map because it will have a significant impact on the future development and character of the Plan area if built.

A Pacific Gas and Electric Company power transmission line and easement approximately 100 feet in width transects the Plan area from north to south, just west of Yuba College. The easement parallels the Linda Drain for part of the distance, along the west side of Yuba College. It is proposed that part of this easement will be used for a drainage and recreation easement. No buildings may be placed within this easement, although other uses such as parking lots, recreation and drainage improvements may be established.

1.4.4. Natural Setting

With the exception of the previously developed properties noted above, the land within the East Linda Specific Plan area is primarily vacant, open pasture, with a few small orchards located at the eastern end. There are virtually no native stands or groves of trees, other than a few scattered oaks, and there are no permanent bodies of water. The Linda and Olivehurst drainage channels are generally 5 to 8 feet deep and 10 to 12 feet wide, and contain no significant vegetation other than grasses and reeds. Topography is essentially flat, ranging in elevation from 62 feet above sea level at the southwest corner adjacent to the Southern Pacific Railroad to about 80 feet at numerous spots throughout the northern half of the Plan area, thus slope is not an issue in the Plan area.

The geologic formation in the Plan area consists of alluvial fan deposits typical of the river floodplains of the Sacramento Valley floor. No active faults are located in or near Linda, and the area is in a "Low Severity" earthquake zone. There are four soil types associated with this floodplain landscape within the East Linda Specific Plan area, including the San Joaquin, Kimball, Capay and Oakdale loams (see Figure 5-1). These soils are deep, generally well-drained, and very productive for a number of crops, although rice has traditionally been the predominant crop due to the low permeability of most of the soils.

With the exception of the Oakdale sandy loam, which is highly permeable and well-suited for urban development, the other three soil types are characterized by low to very low permeability due to the existence of a clay hardpan in the subsoil layer, and are thus subject to perched water table occurrence after heavy winter rainstorms. Depending upon topography and rainfall, water ponding may occur for extended periods during the winter and early spring. These relatively small, shallow ponds are known as vernal pools and, because of their seasonality, they may support rare and unusual flora in the spring as the accumulated water evaporates.

Wildlife within the East Linda Specific Plan area is rather limited due to the lack of land features or significant vegetation other than grasses, although the nearby Feather and Yuba Rivers contain significant riparian habitats which support a great number of wildlife and waterfowl species. Wildlife associated with the open grasslands found within the East Linda Specific Plan area include California quail, meadowlark, dove, common crow, pocket gophers, jack rabbits and lizards.

2. LAND USE ELEMENT

The East Linda Specific Plan provides an opportunity to establish a new and distinct residential area for the community of Linda that will house an eventual population of approximately 15,580. The Plan area will serve primarily as a residential community designed to accommodate the housing needs of Yuba County, allowing young families and employees of Beale Air Force Base, Yuba College and firms within the Yuba County Airport Industrial Park to obtain housing within their own community rather than in Yuba City and unincorporated Sutter County to the west, where much of the region's new housing is being built. The Specific Plan provides a mix of new residential neighborhoods served by schools, parks and shopping areas, all in close proximity to employment centers located in Marysville, Yuba City, Yuba County Airport Industrial Park and Beale Air Force Base, and within a reasonable commuting distance of industrial employment centers in south Placer County and north Sacramento County.

The Plan creates a series of neighborhoods which provide for a variety of residential densities and dwelling types ranging from very low density (two acre minimum lot size) to high density (R-20) apartments. Creating distinct neighborhoods in East Linda is a challenge due to a number of constraints. First, the Plan area is already partially developed with scattered residential land uses including mobile home parks, two-story apartment complexes, and single-family houses situated on lots ranging from 6,000 square feet to ten acres in size. Many of the existing lots, some containing a single family dwelling or mobile home, are long and narrow or have odd shapes which make them difficult to develop properly. Numerous land divisions were approved in the past without proper consideration of the circulation pattern or the relationship between the length and width of the lot (Yuba County General Plan Land Use Element, p. 10).

Second, the area has been plagued by drainage and flooding problems in the past, most recently in February 1986. One of the key objectives of this Specific Plan is to provide a solution to the drainage problems in East Linda. Third, the area is bisected by several major land use features, including North Beale Road, a high-tension power line easement, and the proposed Highway 70 Bypass, planned for an ultimate width of four lanes. In addressing the problems associated with these constraints, it is also useful to recognize that some of these constraints actually provide opportunities for land planning techniques which can not only solve the problems at hand, but also create other community benefits at the same time.

The floodways and drainage channels, for example, will be used to detain excess runoff during periods of heavy rain, but they will also be used to a great extent for parkways and open space, to be linked together by a bikeway and

trail system. The power line easement also forms an open space and pedestrian circulation "spine" which combines with the floodway and street corridors to connect schools, parks and a pedestrian circulation system. This pedestrian and bikeway system will link each neighborhood with Yuba Community College as well.

Land Use within the East Linda Specific Plan is summarized in Table 2-1 and illustrated in the Land Use Plan, Figure 2-1.

The distribution of land use within the Plan area reflects three key factors: the natural features of the area, the basic circulation system (most of which is already existing), and the surrounding land uses. More intense residential land uses, such as multi-family apartments, are generally located near major arterials and commercial services; many of the higher density residential dwellings will be located within a few blocks of Yuba College. Lower residential densities are generally located at the eastern end of the Plan area and away from major arterials, with the densities decreasing toward the east where the Plan area abuts agriculturally-zoned land. The intent here is to create transitional neighborhoods between the higher densities and more intense land uses within the community and the open agricultural lands beyond the Plan area.

Commercial and business professional sites are located near major intersections and along collector and arterial streets to facilitate access. The commercial and business professional land uses are intended to support the shopping, leisure and service needs of the area residents, rather than serve as employment or retail centers for people outside the East Linda area.

2.1 Residential Land Use

2.1.1 Residential Land Use Goals

A fundamental goal of the East Linda Specific Plan is to create residential neighborhoods that are:

- Safe for residents, particularly for children.
- Quiet and buffered from noise and other nuisance factors.
- Convenient in terms of access to public services and goods, for pedestrians, cyclists and vehicle drivers.
- Protected from through traffic.
- Responsive to and incorporating significant natural features and open space.

TABLE 2-1
Land Use Summary

Non-Residential Land Use		Acres
Business and Commercial Uses		
Business Professional		23.2
Commercial		54.9
Mixed Use (B-P/Commercial)		36.0
	Subtotal	114.1
	Total Business and Commercial Uses:	114.1
Other Public/Quasi Public		
Parks		75.2
Recreation/Floodway Easement/Detention Basins		20.0
Elementary Schools (3)		26.0
Junior High School		18.6
High School		36.0
	Total Public /Quasi Public Uses:	175.8
	TOTAL NON-RESIDENTIAL	289.9

Residential Land Use	Dwellings	Acres
Low Density (RRE to R-5)	4,399	1,192.4
Medium Density (R-6 to R-10)	496	64.0
High Density (R-12 to R-18)	1,119	71.5
TOTAL RESIDENTIAL	6,014	1,327.9

Total Non Residential Uses	289.9
Total Residential Uses	1,327.9
Route 70 Bypass Right-of-Way	51.0
Other Street Right-of-Way	91.2
TOTAL SPECIFIC PLAN AREA	1,760.0

EAST LINDA
SPECIFIC PLAN

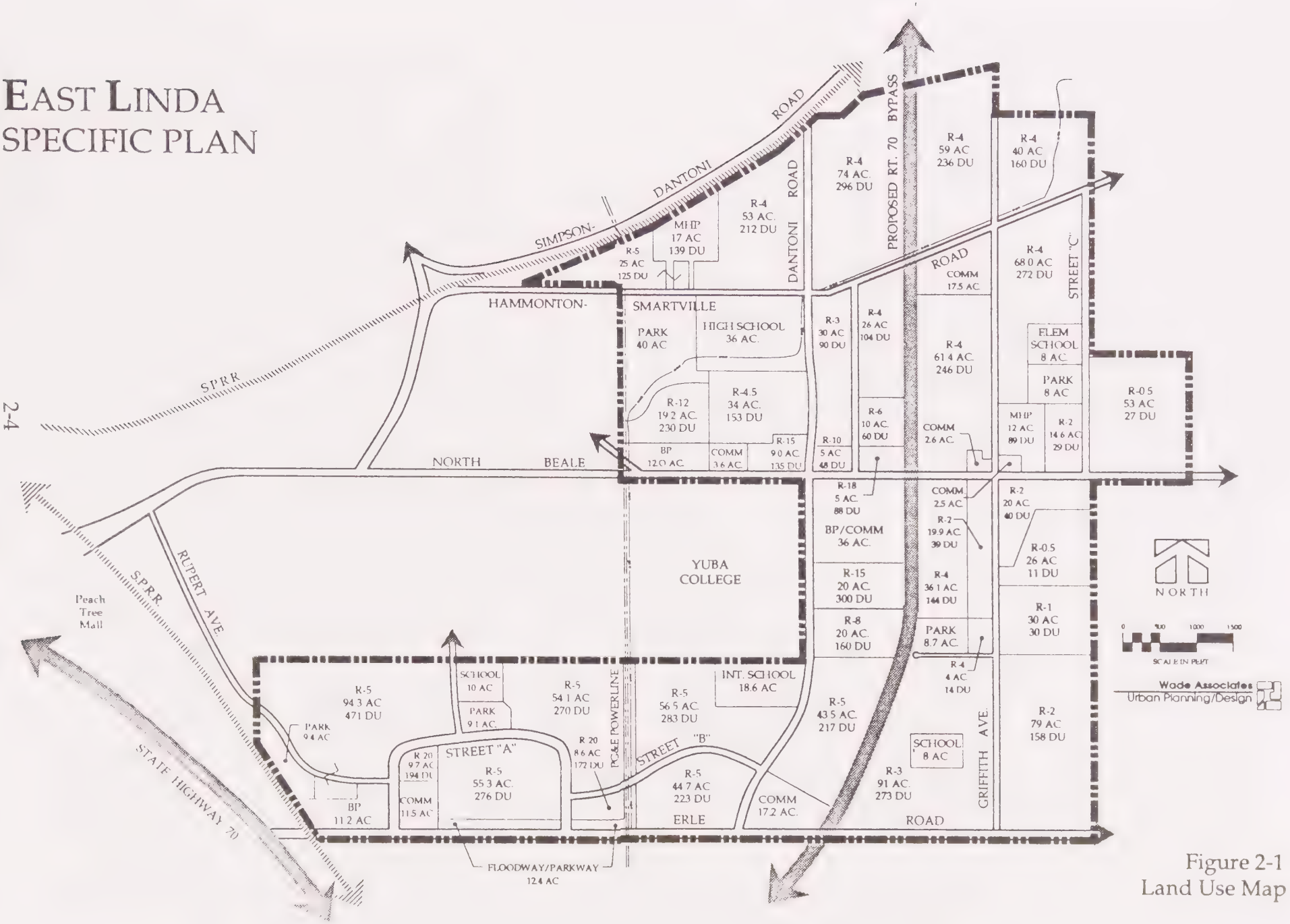


Figure 2-1
Land Use Map

The principal means of achieving these characteristics is through the land use pattern established in the Land Use Map and implemented through the policies and guidelines in this Land Use Element, as well as various policies and concepts set forth in the Circulation Element (Section 4), the Open Space and Conservation Element (Section 5), and the Public Facilities and Services Element (Section 6).

2.1.2 Total Dwelling Units in the Plan Area

The Land Use Map (Figure 2-1) designates the location of 6,014 dwelling units on 1,327.9 acres. The Plan area presently contains approximately 460 units, including 136 apartments, 145 mobile homes and 178 single family homes. These are all proposed to be preserved as part of the Plan, and have been included in the total dwelling unit count, although it is likely that some of the existing units will ultimately be demolished to make way for new development.

2.1.3 Residential Land Use By Density Category

Conventional single family detached homes at 3 to 5 dwellings per acre are the predominant land use category in the East Linda Specific Plan area, comprising 55.5 percent of the total land area. The overall housing market within the Plan area is heavily oriented to low density single family units, due primarily to the relatively low cost of land and housing in comparison to Marysville, Yuba City, and the Greater Sacramento and South Placer County areas to the south. The Plan area is suitable for single family dwellings due to the level terrain and the availability of sewer, water, and major streets.

Single family homes on one-half and two-acre lots are the second largest land use category (in terms of acreage involved). Detached dwelling units at very low densities will provide flexibility in unit siting and design that will allow infill of housing in areas already developed with two to five acre "ranchettes", especially along Griffith Avenue. There is a strong market for single-family homes on these larger lots, and East Linda will be attractive to those desiring such a lot, because their availability in the Sacramento region is dwindling as land prices increase.

The third dwelling unit category is small-lot, or attached dwelling units in densities of 6 to 10 units per acre. With this density, housing affordability may be further enhanced by utilization of innovative housing design and residential development patterns such as zero-lot-line and cluster homes, patio homes, duplexes, four-plexes and townhouses. These techniques can be utilized within planned developments in medium-density projects to provide housing which is affordable to lower-middle income households or to those wishing to own their home without having to do a lot of yard or

property maintenance, while maintaining the overall residential neighborhood character in the community.

The market for this slightly higher density cluster housing, however, is limited in the Linda area due to the relative affordability of conventional single family homes and lower land costs, and thus, a limited amount of medium density residential land has been designated within the East Linda Specific Plan area. Mobile homes are also included in this density category.

The Specific Plan also includes a number of high density, multi-family residential sites. Typically, these residential uses are to be developed at densities in the range of 12 to 20 units per acre. Such units provide a housing base for lower income households, and suitable for single individuals and small households. These higher densities are generally located to the north and east of Yuba College along North Beale Road, and in a few scattered locations.

As summarized in Table 2-2, Residential Allocation by Density Category, the overall mix of dwelling units is weighted toward single family detached dwellings at the lower density range. Medium and high density housing accounts for a fairly small percentage (26.9%) of the total housing stock.

TABLE 2-2

Residential Allocation By Density Category

	No. of Dwellings	%	Avg. HH Size	Population
Low Density (R-0.5 to R-5)	4,399	73.1	2.8	12,317
Medium Density (R-6 to R-10)	496	8.3	2.3	1,141
High Density (R-12 to R-20)	1,119	18.6	1.9	2,126
TOTAL	6,014	100.0		15,584

The average density of all land designated for residential land use is 4.52 dwelling units per acre (6,014 dwelling units/1,327.9 acres).

The ultimate residential population will be 15,584 based on an assumed average household size of 2.59 persons.

2.1.4 Single-Family Neighborhood Design Policies:

1. Subdivisions shall be designed as "residential villages" with distinct boundaries defined by open space corridors, arterial streets and landscaped buffers, including boundary fences where appropriate.

2. Access and infrastructure extensions shall be provided to non-residential uses such as schools, day care centers, parks and neighborhood commercial in the same time frame as those services are provided for residential developments.

3. Each increment of a phased project shall be designed to be complete in its function, circulation, drainage, infrastructure, landscaping and visual aspects.

4. Pedestrian and bicycle travel within and beyond all residential subdivisions should be facilitated through suitable trails, pathways and bicycle lanes as defined in Section 4, Circulation Element.

5. Residences shall be oriented with rear or side yards toward arterial streets. Side lots are recommended at key locations adjacent to the breaks in the sound walls to provide pedestrian and cyclist access from the interior local street to the adjacent bikeway and parkway systems as illustrated in Figure 2-2, Side Lot and Pedestrian Access Schematic.

6. Circulation systems within subdivisions should emphasize internal circulation rather than accommodate through traffic.

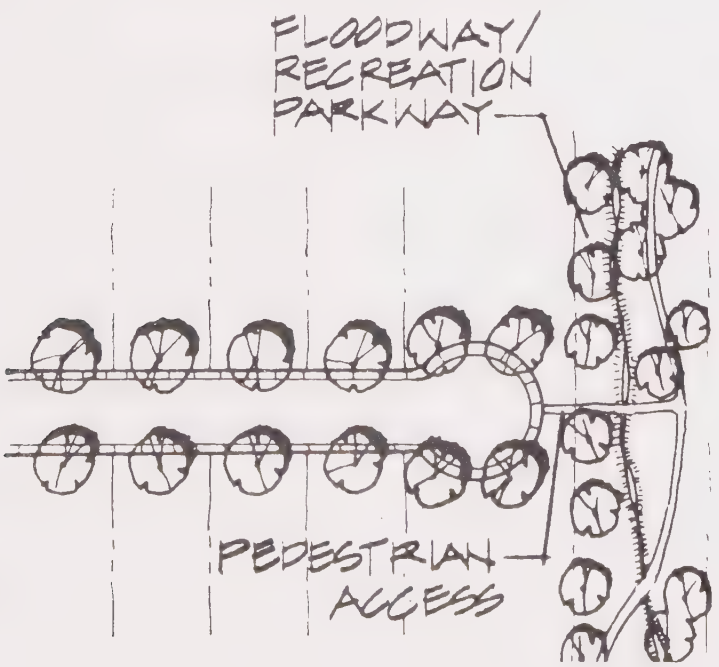


Figure 2-2
Side Lot and Pedestrian Access Schematic

7. Residential lot configurations which will accommodate zero lot line, cluster and other flexible designs are encouraged to maximize land use efficiency and respect natural constraints.

8. Buildings within a neighborhood grouping shall include a variety of roof lines, building heights and color themes to achieve visual interest. The architectural style shall be compatible among all buildings within each residential neighborhood.

9. The following information will be provided at the time of development of each subdivision:

a. Overall schematic layout of the circulation system for the entire neighborhood including both auto and pedestrian/bicycle systems. The street system is to be designed to discourage through traffic. The pedestrian/ bicycle trail/open space system should be separate from auto traffic wherever possible and must illustrate how the neighborhood system links with the larger backbone system and activity centers, such as parks.

b. Neighborhood landscaping shall be consistent with Section 8, Landscape Guidelines. Overall coordinated design and landscape concept for the entire neighborhood including design, siting and architectural standards as well as coordinated landscape treatment and materials. Common street trees are to be identified for all neighborhood roadways to create a canopy.

c. A master grading concept for the entire neighborhood indicating the location of significant trees and the drainage pattern that will result from grading.

d. Project entry signage and soundwall design and materials are to be coordinated throughout the entire neighborhood. Pedestrian access should be provided in the soundwall at intervals of not less than every 600 linear feet along the perimeter of a neighborhood where feasible and appropriate.

10. The siting of nursery schools, day care centers, and residential care facilities for six or fewer people shall be encouraged within neighborhoods.

2.1.5 Attached and Multi-Family Housing Policies:

1. Townhouse and apartment developments shall be compatible, with regard to bulk, design, grading and landscaping, with developments on surrounding parcels.

2. Separate vehicular and pedestrian circulation systems shall be provided which minimize auto and pedestrian contact.

3. Common open space areas shall be planned with specific functions in mind. Such areas should not be "left-over" spaces after the buildings have been designed and sited. A minimum of 25% of gross site area shall be left in open space.

4. Open space areas shall be connected with on-site pedestrian circulation systems. Common areas shall be readily accessible from all buildings.

5. Open space areas shall be used to preserve existing natural features when present.

6. Residential units adjacent to existing open space corridors should be oriented towards the open space and should incorporate such corridors in project design.

7. Residential facilities such as swimming pools, tennis courts, tot-lots and picnic area shall be provided to meet the projected needs of the project population.

8. Buffering between multi-family development and major roadways, or non-residential uses shall be provided by setbacks, soundwalls, landscaping and berming, or a combination of all these.

9. Buildings shall be sited with regard to topography, vegetation and other physical features of each project parcel and adjacent parcels.

10. Architectural treatment and detail should be consistent among buildings, but should create visual interest through orientation, form and alignment of individual buildings.

11. Parapet walls, when required, should be treated as an integral part of building design. Such walls should not appear as unrelated visual elements.

12. Parking areas shall be landscaped such that a tree canopy will shade not less than 50 percent of the parking area within a period of 15 years.

13. Each dwelling unit shall be provided with a minimum of two off-street parking spaces, as specified in Section 12.40.110 of the Yuba County Zoning Ordinance.

Additional design standards and landscaping standards are addressed in Section 8, the Urban Design Element.

2.2 Commercial Land Uses

A total of seven sites are designated for commercial land use within the East Linda Specific Plan area. These sites are intended to be neighborhood and community service centers which will serve the frequent shopping needs of Plan area residents. The commercial land use designation encompasses a total of 90.9 acres, in parcels ranging from 2.5 to 36 acres in size. The 36-acre parcel is designated for a mix of commercial and business-professional uses, and may contain a community center or satellite government facility. The Plan area will ultimately provide up to 1.3 million square feet of commercial space to serve the population of 15,584.

The larger sites of 10 acres or more will provide for typical neighborhood shopping facilities including, but not necessarily limited to, the following:

- Discount Drug Store
- Supermarket or Grocery Store
- Variety Store
- Hardware Store
- Restaurant/Coffee Shop
- Convenience Services such as Beauty/Barber Shops or Dry Cleaners
- Banks and Savings & Loans
- Specialty Stores such as Stationery, Gift or Clothing

The 36-acre mixed-use site, located on the south side of North Beale Road between the proposed Highway 70 Bypass and the southern extension of Dantoni Road, has the potential to serve as the commercial center of East Linda; this potential is enhanced by its central location, close proximity to Yuba College, and its good street and highway access. The "Mixed Use" land use designation is intended to integrate a variety of commercial retail, business and professional services, and entertainment uses in a single location to help reduce the need for travel, and to support the sense that the community is "self-contained" with a strong sense of identity. This site is not intended, however, for development of a large shopping center or mall which would diminish or eliminate the potential for revitalization of the Peach Tree Mall.

Special design considerations will apply to the Mixed Use category to avoid the development of conventional "strip" commercial uses. The site is large enough to accommodate a combination of uses including, but not limited to, a furniture or sporting goods store, movie theaters or other entertainment activities, various specialty stores, professional offices, and possibly a community cultural center and/or County government office complex. A study completed for the County indicated that up to 100,000 square feet of institutional space may be appropriate and feasible.

The smaller commercial sites can be expected to provide additional convenience services, as well as small specialty retail, convenience commercial and auto service stations.

2.2.1 Commercial Land Use Policies

Commercial land use can be successfully integrated into a neighborhood with minimal negative effect if care is taken in the siting of the buildings, the ease of public access, and the physical interface with adjacent land use.

The following policies are addressed primarily to the issues of land use relationships to adjacent uses. More detailed policies relating to the specific design of commercial land use are presented in Section 8, the Urban Design Element.

1. Each step of a phased project shall be designed to be complete in its function, circulation, drainage, infrastructure, landscaping and visual aspects.

2. Each commercial area shall be accessible from at least one major collector or arterial street, with sufficient design capacity to accommodate traffic generated by the businesses as well as other local traffic.

3. Commercial areas shall be accessible by pedestrian and bicycle routes, as well as future potential public transportation systems.

4. Pedestrian walkways shall provide access to commercial areas separate from major vehicular driveways and circulation where feasible.

5. Secure bicycle parking areas shall be provided at each commercial location.

6. Facilities to encourage and accommodate pedestrians and public activity, as well as to create a sense of "place", shall be incorporated into the design of commercial projects of ten (10) acres or more. Such facilities shall include, but not be limited to, plazas, fountains, pedestrian seating areas and other design elements.

7. Buildings shall be set back a sufficient distance and be designed to mitigate visual impacts on adjacent residential units. The setback will vary dependent upon commercial building height and bulk and type of use, but shall be a minimum of 20 feet for a single story building, and 30 feet for a two or more story building. Trash enclosures, noise generating equipment and other nuisances shall be located away from adjacent residential uses.

8. Commercial sites that abut residential areas shall provide a minimum six-foot high masonry wall and landscaped buffers of not less than 10 feet in width.

9. Commercial projects adjacent to residential land uses will be subject to performance conditions as part of the project review process. Such standards may include, but are not limited to, noise generation, hours of operation, types of use, delivery times, etc.

10. Lighting from commercial projects shall not create glare for adjacent residential uses.

11. Buildings shall be designed and sited in proper proportion and manner to be compatible with the architectural design and siting of existing and proposed buildings in surrounding residential areas.

12. Commercial centers shall have a unified design utilizing consistent building materials, architectural styles, textures, detail, colors, landscaping and signage. When the rear or side of a commercial building is visible to the public or from adjacent land uses, such elevations shall be treated with the same architectural treatment, materials and colors as the primary frontage.

13. Distinctive architecture, variations in building orientations, setbacks and roof-lines shall be used to create interesting projects; however, "trademark" buildings dictated by chain or franchise businesses are generally discouraged.

14. Varied textures, materials, colors and landscaping shall be used to identify project entrances and to break-up paved areas.

15. Tilt-up type construction is generally discouraged for commercial buildings. If utilized, it shall be covered by stucco, brick or other approved surface treatment.

16. Parking lot design shall provide for good aisle circulation, adequate truck loading areas, minimization of conflicts, and ease of access. Angle parking with one-way circulation shall be utilized when practical.

17. Parking should be located along the sides and/or rear of structures rather than in front wherever feasible, in order to pull storefronts closer to the sidewalk, thereby creating environments which are inviting to pedestrians as well as more human in scale.

18. No outside, unscreened storage will be permitted in commercial areas. Loading, service, and trash enclosure areas shall be fully screened by a combination of masonry walls, grade separation, and/or dense landscaping.

18. No outside, unscreened storage will be permitted in commercial areas. Loading, service, and trash enclosure areas shall be fully screened by a combination of masonry walls, grade separation, and/or dense landscaping. Mechanical and utility service equipment on buildings should be designed as part of the structure.

19. Provide solar access, wind protection, and shade, depending upon the time of year, to enhance the quality of outdoor space.

20. Provide visually-separated service entries for the delivery of merchandise.

21. Screens, fences and accessory structures should be compatible in material, color and texture with the main buildings.

22. The buildings should be designed to fit into natural and man-made surroundings using landscape and earthworks where feasible. When adjacent to open space areas, orient towards and incorporate such areas into project design.

23. Buildings should be sited with consideration given to noise, safety and privacy for adjacent residential uses.

24. Landscaping shall be designed to provide shading of not less than 50 percent of the parking lot within 15 years.

25. Buildings shall not be more than two stories or 35 feet in height.

26. Off-street parking shall be provided at set forth in Chapter 12.85 of the Yuba County Zoning Ordinance.

2.2.2 Special Mixed Use Guidelines

1. The mixed use land use designation shall be subject to the commercial land use policies listed above.

2. Buildings within the mixed use site shall be of an architectural design and character to create an identity as the commercial focus of East Linda. Larger-scale, two story buildings are encouraged.

3. The parking required for the sum of all uses may be reduced if some of the individual uses have mutually exclusive hours of operation.

4. Pedestrian plazas with landscaping, seating, drinking fountains and points of interest, such as water elements or sculptures, shall be incorporated into project design.

2.3 Business-Professional

Business-professional uses within the East Linda Specific Plan area are intended primarily to serve the needs of local residents. Two sites, one consisting of 12 acres along the north side of North Beale Road, directly across from Yuba College, and an 11.2-acre site at the southwest corner of the Plan area on Erle Road, have been designated exclusively for business-professional uses. Such uses may include attorneys, accountants and financial consultants, architecture, engineering and planning firms, real estate companies, insurance companies, travel agencies, medical and dental offices, and other similar services. In addition, another "mixed-use" site, located on the south side of North Beale Road, east of Yuba College, would also provide for business-professional uses in combination with a variety of retail commercial and, possibly, satellite government offices or facilities such as a community center.

2.3.1 Business-Professional Policies

The following policies are addressed primarily to the issues of land use and relationships to adjacent uses. More detailed policies relating to the specific design of commercial land uses are presented in Section 8, the Urban Design Guidelines.

1. All building and project entries shall be well defined and establish a clear sense of arrival through the use of varied textures, materials, colors, and landscaping.

2. Business-professional buildings shall be oriented adjacent to roadways and sidewalks, with the primary parking areas at the rear and/or side of the building in order to make the buildings more inviting to pedestrians.

3. Pedestrian plazas with landscaping, seating, drinking fountains and points of interest, such as water elements or sculpture, should be incorporated into the project design.

4. Secured bicycle storage, exercise and jogging facilities, lockers, showers for employees are encouraged within the business-professional land uses to encourage walking and cycling to work. Bicycle storage is to be provided, in a highly visible area, at a ratio of one (1) space per 1,000 square feet.

5. No outside, unenclosed storage shall be permitted. Loading, service and trash enclosure areas shall be fully screened from view by a combination of masonry walls, grade separation and/or dense landscaping.

6. Business-professional sites shall be accessible by pedestrian and bicycle routes, as well as future potential public transportation routes. Pedestrian walkways shall provide access to business-professional areas separate from major vehicular driveways and circulation.

7. Buildings shall be set back a sufficient distance and be designed to mitigate visual impacts on adjacent residential uses. The setback will vary depending upon building height and bulk, type of use, topography, etc. Single-story buildings which abut residential lots shall be set back from the property line adjacent to the residential lot a minimum of 20 feet; two-story buildings shall be set back a minimum of 30 feet. Trash enclosures, noise generating equipment and other nuisances shall be located away from adjacent residential units.

8. Business-professional sites that abut residential areas shall provide a landscape buffer of not less than 10 feet wide for single-story buildings and 15 feet wide for two-story buildings.

9. Parking lots shall be designed to provide good circulation, minimize conflicts, and promote ease of access. Off-street parking shall be provided for all business-professional buildings at a ratio of one (1) space for each two hundred fifty (250) square feet of gross floor area.

10. Business-professional projects adjacent to residential land uses may be subject to performance conditions as part of the project review process. Such standards may include, but are not limited to, noise generation, type of use, hours of operation, delivery times, etc.

11. Lighting from business-professional projects shall not create glare for adjacent residential properties.

12. Buildings shall be of an architectural design and character compatible with other buildings in the Specific Plan area in order to provide the quality image desired by professional and corporate users. Business-professional buildings are to have unified design utilizing consistent building materials, architectural style, textures, detail, landscaping and signage.

13. Diverse building layouts and orientations, varying setbacks, building heights and bulk, staggering of buildings and rooflines, and distinct architectural forms are encouraged to create visual interest.

14. Compatible building materials, textures, detail, colors, roof treatment, and landscaping are to be used on all sides of buildings visible from roadways, adjacent properties or the general public.

15. Tilt-up type construction is discouraged. If used, it shall be covered by stucco, brick or other approved surface treatment.

16. Buildings shall be oriented adjacent to roadways and sidewalks with the parking located to the rear or side in order to make the streets more inviting to pedestrians.

17. Screens, fences and accessory structures should be compatible in material, color and texture with the main buildings.

18. The buildings should be designed to fit into the natural and man-made surroundings using landscape and earthworks where feasible. When adjacent to open space areas, the buildings should be oriented towards and incorporate such areas into the project design.

19. Landscaping shall be designed to provide shading of not less than 50 percent of the parking lot within 15 years.

20. Buildings shall not be more than two stories or 35 feet in height.

2.4 Other Land Uses

The Specific Plan Land Use Map illustrates a number of land uses that are typically not in the category of private use. These include the public and quasi-public uses and the spaces required for infrastructure and circulation. Public uses within the Plan area include the schools, parks, library and all other public improvements. These uses are addressed in other sections of the Specific Plan that deal directly with the particular issues and policies germane to their function and character. Quasi-public uses include other as yet unspecified uses such as day care centers, nursery schools, churches and health clubs. In general, public and quasi-public uses shall be subject to the same landscape, design and development standards that apply to adjacent land uses or projects.

3. HOUSING ELEMENT

The East Linda Specific Plan is designed to be primarily a residential community, serving the population and housing growth needs of Yuba County. The Plan contains a range of densities that will allow the development of 6,014 dwelling units, eventually housing a total of approximately 15,580 people.

3.1 Primary Housing Goals

The Yuba County General Plan Land Use Element sets forth the following residential land use goal and policies:

Goal: To promote the diversity of residential densities which are consistent with the social, economic, transportation and environmental goals of the county.

Policies:

1. Appropriate zoning classifications shall be established to provide a diversity of housing sites varying in size, density and location.

2. Multi-family residential development shall be located close to high intensity land uses and the availability of public water and sewage disposal systems.

Accordingly, the primary housing goal for the East Linda Specific Plan is to provide a mix of housing types and prices that will accommodate a significant portion of the Yuba County demand for housing opportunities, while ensuring that the housing development meets the other General Plan goals and policies, such as the need for agricultural buffering.

3.2 Housing Market Conditions

Before establishing the mix of residential land uses and densities for the East Linda Specific Plan, it is necessary to evaluate the housing market both locally (within Yuba County and the community of Linda) and beyond (Sutter County and south Placer and north Sacramento counties). This requires a determination of the demand for housing based not only on local population and job growth, but also the job growth projected for the rapidly-growing south Placer and north Sacramento county areas, and the likelihood that a significant number of new employees working in those large job centers would be willing to commute from a more affordable home in East Linda.

3.2.1 Existing Population and Housing

The community of Linda had a population of approximately 11,980 as of October 1988, according to the Sacramento Area Council of Governments (SACOG), an increase of 17.2% over the 1980 population of 10,219. The number of housing units increased by 10.1%, from 4,156 to 4,577, over the same period, although the number of occupied units has increased at a greater rate as the demand for housing has increased relative to the supply. In 1980, the vacancy rate for all housing was 9%, but that figure has fallen below 5% in recent years as the construction of new housing in Linda has slowed. The average household size is currently about 2.75 persons.

East Linda, of which the East Linda Specific Plan is a part, has approximately 7,270 residents, 60.6% of the total Linda population. The Specific Plan area has about 980 residents, 8.1% of the total, living in 459 dwelling units. These 459 units include 178 single family homes, 136 apartments, and 145 mobile homes, located primarily along Griffith and Alberta Avenues and the east side of Dantoni Road. The apartments, most of the mobile homes, and a small number of single family homes have been built since 1975, whereas most of the single family homes were constructed in the 1950s and 60s.

Linda's population is 20.9% of Yuba County's current estimated population of 57,330, roughly the same percentage as in 1980; both are expected to increase at approximately 2% per year for the next 20 years or so, according to the Yuba County Planning Department. Based on a 2% annual growth rate, the population of Linda would be approximately 14,900 by the year 2000, although SACOG projects a lesser population of 13,892.

Linda's population will probably be higher, however, due to the accelerated rate of development expected to occur as a result of the East Linda Specific Plan; an average annual growth rate of 2.5-3.0% is more likely. It is also likely that by the year 2015, assuming a 25-year build-out of the Plan area, Linda will have a greater percentage of Yuba County's population, probably closer to 25%. This is because a large portion of Yuba County's growth over the next 20 to 25 years will be concentrated in Linda as development of the East Linda Specific Plan occurs. Table 3-1 shows past, present and projected population figures for Yuba County and Linda, assuming an annual growth rate of 2% for the county and 2.75% for Linda, beginning in 1990.

TABLE 3-1

Population From 1970 - 2010

	1970	1980	1989	2000	2010
Yuba County	44,736	49,733	57,330	71,735	87,000
Linda	7,731	10,219	12,000	15,740	20,650

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, 1980 Census of Population and Housing; Wade Associates.

3.2.2 Income

Incomes have been lower overall in Yuba County than in Sutter County or the Yuba-Sutter region for the past several years, and lower in unincorporated communities such as Linda and Olivehurst than in the cities of Marysville and Yuba City. In 1980, the median family income in Yuba County was $13,751, while the Yuba City SMSA had a median income of $16,004. Although no recent household income figures are available for Yuba County, the median income for the Yuba City MSA (Metropolitan Statistical Area) is currently estimated to be $27,500, according to the U.S. Department of Housing and Urban Development. Estimates prepared by the U.S. Census Bureau for 1985 place the per capita income of Sutter County at $9,164, considerably higher than Yuba County's $7,471. Marysville, however, had a higher estimated per capita income ($10,144) than Yuba City ($8,898).

3.2.3 Housing Prices

Housing prices, like incomes, are also lower in Yuba County than in Sutter County in general, and lower in Linda and Olivehurst than in the rest of Yuba County in particular. The median home price in the overall Yuba-Sutter region in May 1989 was approximately $84,000, a 64.7% increase over the 1980 figure of $51,000. In 1980, the median home price in Linda was $42,030, slightly lower than the $44,500 median for Yuba County. The Yuba/Sutter Board of Realtors estimates the median home price for May 1989 in Yuba County to be about $81,000, while in Sutter County it is close to $86,500.

The active listings for June 1989 indicate an average asking price of $90,000 to $92,000 for a home in Yuba City, but only $65,000 to $70,000 in Linda. As an example, a standard 1,400 square foot house on a 6,000 square foot lot commanding $80,000 in Yuba City and Marysville would cost only about $60,000 in Linda. Thus it appears that home prices have risen at a higher rate in Yuba and Sutter Counties than in Linda. This could probably be explained by a couple of factors.

First, both Linda and Olivehurst have long been considered less desirable than Yuba City, Marysville, and other foothill communities in Yuba County, thus housing prices have been kept lower by a weak demand. Although there are no current statistics, it is believed a large percentage of employees of Beale Air Force Base and Yuba College live in Yuba City, where there is a greater variety of quality housing to choose from relative to Yuba County. Second, the disastrous flooding in February 1986 damaged a number of homes in Linda, resulting in a major blow to the local housing resale market. For example, homes in the Silverwood tract, north of North Beale Road and east of the Diamond Lumber facility, sold in the mid-$30,000s when constructed in the early 1980s, but had dropped in value to only about $30,000 after the tract was flooded by three feet of water. Today, the homes have gained value and are selling in the mid $50,000s.

Nevertheless, better homes in Linda are beginning to appreciate more rapidly. Homes in the Country Club Park tract, just west of Yuba College, are typical of the single-family dwellings constructed in the region. Built in the 1960s and 1970s, the 181-unit tract consists of 1,300 to 1,400 square foot, three bedroom homes on 6,000 to 7,000 square foot lots. The selling price of these homes increased over 15% in one year, from $52,000 in April 1988 to $60,000 in April 1989, indicating that the demand for single-family homes is increasing.

Table 3-2 below shows median home prices for different areas in the Sacramento Valley region. As can be seen, home prices in Linda are not only lower than in the rest of Yuba and Sutter Counties, but are also considerably lower than in Sacramento, west Nevada and south Placer Counties. The standard three-bedroom house that sells for $60,000 in Linda would cost more than twice as much ($138,500) in Placer and Nevada Counties, thus it would appear that there would be a growing market for the more affordable housing opportunities in Linda as prices continue to climb in the Sacramento and Foothill regions.

TABLE 3-2

Comparative Median Home Prices: May 1989

Linda	$ 65,000
Yuba County	81,000
Sutter County	86,500
Chico	96,000
Sacramento County	103,250
Placer County	138,500
Nevada City/Grass Valley	138,680

Source: Sacramento County, Placer County, Yuba/Sutter, Nevada County and Chico Boards of Realtors.

Rental costs in Linda and other parts of Yuba County are also considerably lower than in Yuba City and Sacramento and Placer Counties. A two bedroom apartment typically rents for about $350 in Yuba County, but about $450 to $475 per month in Sacramento and south Placer Counties. Most of the larger apartment complexes in Linda, however, are low-income, with rents subsidized through Section 8, Farmers Home Administration or other government programs. Tenants typically pay 30% of their monthly income toward their rent, with the remainder subsidized by the government.

3.2.4 Housing Need Projections From 1985 Housing Element

The Housing Element of the Yuba County General Plan, adopted in October 1985, projects the total number of new housing units needed for the entire county as well as the unincorporated areas, for the period beginning January 1, 1984 and ending July 1, 1991. The total overall housing need for Yuba County for that period is 2,091 dwelling units , while the unincorporated portion has a total housing need of 1,692 units through July 1, 1991. The Housing Element breaks down those 1,692 units equally among the four standard income categories as shown in Table 3-3 below. Very low income is defined as less than 50% of the median family income for the Yuba-Sutter MSA, low income is from 51 to 80% of median family income, moderate income is from 81 to 120%, and above moderate is that over 120% (Yuba County Housing Element, p. 14).

TABLE 3-3

New Housing Units Needed: 1/1/84 To 7/1/91
Unincorporated Yuba County Areas

Income Category	Increase Needed	% of Total Growth	Annual Increase
Very Low	423	25%	57
Low	423	25%	57
Moderate	423	25%	57
Above Moderate	423	25%	57
TOTAL	1,692	100%	228

Source: Yuba County General Plan Housing Element, October 1985.

In making these projections, Yuba County planners assumed that the income distribution among new households within the county will be equal among the four income categories, even though SACOG projected that over 50 percent of the growth within both the entire county and unincorporated

portion of the county would be in the above moderate income category (over 120 percent of the combined median family income for Yuba and Sutter counties).

SACOG's projections were based on the fact that Yuba County has a significantly lower overall family income than Sutter County, and because the SACOG allocation formula seeks to equalize the distribution of income among the bi-county jurisdictions. County planners believed it was improbable that 50 percent or more of the new households moving to the county would be in the above income category, because above moderate income households have greater housing opportunities due to their higher income levels, and thus have more freedom to live where they wish, rather than where housing is more affordable (Yuba County General Plan Housing Element, p. 28).

In determining the types of housing needed for each income level, it is useful to correlate income ranges to residential densities, although it should be viewed as a guide rather than a formula to be strictly followed. In general, it is presumed that higher residential densities, (ie. multi-family housing), equate to housing prices that are affordable to households in the lower end of the income range. Consequently, the mix of low, medium and high density housing is considered to be a factor in assuming housing affordability for the full range of household income groups.

The Yuba County Housing Element assigns development density ranges to each of the four housing price categories as shown in Table 3-4 below:

TABLE 3-4

Residential Density Relative To Housing Price

Unit Price Category	Density Range (units/acre)	Typical Density (units/acre)
Very Low	10-29	15
Low	7-20	10
Moderate	4-17	6
Above Moderate	1-7	3

Source: Yuba County General Plan Housing Element, October 1985.

Applying these density ranges to housing affordability, very low income units would consist of higher density apartment projects, some of which would have rents subsidized through various government programs. The

apartment complexes located across North Beale Road from Yuba College are good examples of this high density very low income housing. The College View Apartments, built in 1980, are all very low income; the tenants pay 30% of their monthly income in rent, with the remainder paid through Section 8 funds. The Alberta Gardens and Casa Del Este apartment complexes (which actually appear and function as one), also very low income, have rents which are subsidized by Farmers Home Administration funds; the tenants also pay 30% of their income in rent. All three of the apartment complexes are fully-occupied.

Low income units generally include apartments and smaller, older single family dwellings and mobile homes in less desirable neighborhoods. Examples of these types of units are commonly found throughout the communities of Linda and Olivehurst. Moderate income units typically include modest single family dwellings, new mobile homes, and higher quality apartment and condominium complexes. This price category of housing is also found in areas of Linda and Olivehurst, with the exception of higher quality apartment or condominiums; most of the existing apartments in Linda and Olivehurst are lower income, and there are no condominiums.

Above moderate income units include the newer single family homes at lower densities situated on larger lots. An example of above moderate income housing in East Linda is the Lago Road tract, consisting of ten semi-custom single family homes ranging from 1,600 to 1,900 square feet, situated on 2.3 acre lots. Completed in 1987, these homes initially sold for $96,000 to $118,000, and are now likely valued at $120,000 to $136,000.

Using the figures for housing units needed from Table 3-3, the number of units needed for each income category can be projected for the past five years, from January 1, 1984 to January 1, 1989. Assuming an annual need of 57 units within each income (or price) category, 285 units should have been built to fill the need for housing in each price range, with a grand total of 1,140 units provided in unincorporated Yuba County over the five year period ending January 1, 1989.

3.2.5 Housing Construction in Yuba County Since 1984

A review of housing construction since January 1, 1984 in the unincorporated portion of Yuba County, shown in Table 3-5, indicates that the 886 net dwelling units added to the housing stock during the five year period satisfied only 78% of the projected need. Thus, there was a shortage of 254 housing units, with the largest deficit being in the very low and low income categories. A high percentage of the new housing was in the moderate and above moderate range, assuming the correlation of price range to residential density indicated in Table 3-4.

TABLE 3-5

Housing Added From 1/1/84 To 1/1/89 (Less Demolitions)

Unit Price Category	Number of Units		
	Uninc. Yuba County	Linda	Specific Plan Area
Very Low/Low (Apartments)		53	0
Moderate (Mobile Homes)		87	55
Moderate/Above Mod. (Single Family Homes)		(28)	11
TOTAL	1,047	112	66

Source: SACOG Housing Module, June 1988; SACOG Growth Projections, October 1988.

Over half of the new housing units constructed in unincorporated Yuba County were mobile homes, a large percentage of which are located in rural or semi-rural areas. Most of the new housing built within the East Linda Specific Plan area were mobile homes as well, notably the Castlewood Mobile Home Park. Nearly all of the 57 apartment units built in Yuba County are located in Linda, although none have been constructed within the East Linda Specific Plan area since 1980.

Ten of the 11 single family homes constructed within the Plan area are the semi-custom homes on large lots, situated around the Lago Road cul-de-sac, described in Section 3.2.2 above. The listing agent and a local real estate appraiser both commented that homebuyer interest was strong, and that the homes sold fairly quickly, indicating a reasonably good market for this type of product in the area. In fact, the developer wished he'd had another 10 or 15 lots to develop, and believed he would have had no problem selling the additional homes.

In addition to those 11 homes, there is an approved tentative tract map for a 152-unit single-family subdivision, located across North Beale Road from Yuba College. Preliminary site work is already in progress, and water and sewer lines were being installed as of June 1989. This will be the largest tract of homes built in Linda since 1981.

It is of interest to note that, while 30 new single family homes were built in Linda over the past five years, more than 50 homes in West Linda were so heavily damaged in the February 1986 flood that they had to be demolished,

thus there was actually a net decrease in the number of single family dwelling units in Linda between January 1, 1984 and January 1, 1989.

3.2.6 Housing Construction in Yuba City/Sutter County

A review of residential construction activity reveals that 1,091 dwelling units were constructed in Sutter County, including Yuba City, between 1986 and 1988 (Yuba City Planning Department). Of those units, 767 were located in Yuba City and 324 in Sutter County. In Yuba City, the 767 units were evenly split between single-family homes and multiple units, while the units in unincorporated Sutter County were strictly single-family dwellings. There were approximately 500 approved but unbuilt single-family units and 276 multi-family units in Yuba City as of May 1989.

3.2.7 Local Employment Characteristics

The employment base in Yuba County has historically been concentrated in the fields of agriculture, forestry and fisheries, mining, wood and food products manufacturing, retail trade, education, and government. The largest single employer in the County is Beale Air Force Base, with 5,388 military and civilian employees as of September 30, 1988 (Beale Annual Report, Fiscal Year 1988). The total workforce was estimated to be 18,700 in 1988, with an average unemployment rate of 11.4%, down from a high of 19.0% in 1983.

Unemployment remains a problem, however, and is significantly higher than the state average of 5.3% (State Employment Development Department, Annual Planning Information, June 1989). In addition, some industries such as agriculture, forestry, fishing and food processing are highly seasonal, resulting in periodic higher unemployment, usually every winter and early spring. Because a significant percentage of the labor force is employed in these industries, the effects of the seasonal slowdowns are felt throughout the local economy.

In an effort to improve the economic conditions in the region, the State of California recently designated the Yuba-Sutter area as one of ten Enterprise Zones. The California State Enterprise Zone Program offers existing and new businesses a variety of tax and other incentives, including funded employee training, below market land prices and financial and technical assistance, which can reduce the cost of doing business and increase revenues. The Yuba-Sutter Enterprise Zone officials are aggressively working to attract new business and industry to both counties, with a major emphasis on the Yuba County Airport Industrial Park, which contains 265 acres of improved industrial space, 55.5% of which is already developed or leased. In addition to those 265 acres, Yuba County has another 3,900 acres of land zoned for light or heavy industry, while Yuba City/Sutter County has approximately 1,050 acres

of vacant industrial land (County of Yuba Industrial Development Department: Standard Industrial Survey Report, April 1988).

As noted above, wood products and food processing have historically been two of the major industries in Yuba County, due primarily to abundant supplies of unskilled, trainable labor and locally based raw materials, namely rice, fruits and vegetables for food processing, and timber, wood chips and, strangely enough, rice hulls for the manufacture of wood products such as lumber, plywood, wood stakes and fibreboard, and durable goods such as doors and cabinets. Both industries are still important to the economy of the region, and are typical of the types of business and manufacturing companies sought after by local economic development officials. Recent firms locating in the area include manufacturers of paint, metal doors, cabinetry and other finished wood products, fiberglass camper shells, and fruit juices.

High technology and related electronics industries are not likely to locate in the Yuba-Sutter region over the foreseeable future due to the lack of a skilled labor pool and the high mineral content of the local groundwater supply (many electronics manufacturing processes require large, inexpensive quantities of pure water). Recognizing these limitations, local economic development officials are not putting forth any effort to attract high tech industries, but are concentrating instead on attracting those which are more suited to local market conditions.

Because Yuba County has an abundant supply of unskilled, trainable labor and fairly high unemployment, employee turnover and absenteeism are low. This fact, combined with the low land and housing costs of the area and the close proximity to the rapidly expanding Sacramento metropolitan region, leads one to conclude that the Yuba-Sutter region will likely undergo substantial economic and job growth in the future. The Employment Development Department forecasts healthy job growth in the retail trade, services, lumber and wood products, and construction industries, with stable growth in the other industries.

In addition, the likely closure of Mather Air Force Base and the subsequent reassignment of military personnel will result in a significant expansion of the mission at Beale Air Force Base. Already, the flight navigation school is being relocated from Mather to Beale, and the number of officers at Beale may be expanded from the current 500 to as many as 1,700 by 1994. Housing and facilities planners at Beale have expressed interest in the East Linda Specific Plan insofar as the Plan will serve to encourage the development of quality housing to meet the needs of these officers and their families. At present, East Linda does not offer a lot of high quality housing opportunities, and there are only 1,712 housing units on base, thus many of the military personnel must live in Yuba City. Since East Linda is located just west of Beale, it is the most likely location for new off-base housing.

3.2.8 Employment Trends Beyond Yuba County

Although Yuba County has recently experienced increased business and industry expansion and job growth, resulting in generally improving economic conditions, that growth has been greatly outpaced by the growth and economic expansion in Placer and Sacramento Counties. These counties have historically been stronger economically than Yuba County, with unemployment rates less than half that of Yuba. Placer and Sacramento Counties have unemployment rates of 5.1% and 5.3%, respectively (State Employment Development Department, June 1989). Estimates of the total number of jobs expected in South Placer County alone at full buildout are as high as 115,000 (Wade Associates, 1989).

Projections can be made of the number of jobs expected at buildout within various commute sheds, from 5 to 40 miles. Approximately 31,430 jobs are expected within a five mile radius, or commute shed, of East Linda, and a total of 55,090 jobs within a ten mile radius. This 10-mile commute shed would include the employment centers of Marysville, Yuba City, the Yuba County Airport Industrial Park, Beale Air Force Base, and various employment generators in Linda and other areas of Yuba and Sutter Counties within a 10-mile radius.

Another 99,030 jobs are expected within the 10 to 30 mile commute shed, for a total of approximately 154,000 jobs. This 30-mile commute shed would include the city of Lincoln as well as the northern half of Roseville and Rocklin, where a substantial number of new jobs are projected over the next 20 years, as noted above. Beyond 30 miles are the employment centers of North Natomas, McClellan Air Force Base and southern Roseville, where another 100,000 jobs are likely at buildout. A more detailed breakdown of the number of jobs by employment center and commuting distance is provided in Appendix A, Jobs Within East Linda Commute Shed.

According to the Employment Development Department, employment growth in Placer County has exceeded growth in the labor force by a wide margin over the past four years, and this trend is expected to continue for at least the next several years. Construction of new housing in south Placer County is occurring at an equally rapid pace and, based on the amount of land targeted for various densities of residential development, an adequate supply of housing is projected to be constructed, in accordance with the jobs/housing balance policy adopted by the communities of Roseville, Rocklin and Lincoln, and Placer County.

Despite the large quantities of homes being built, however, home prices are rising, evident from the figures in Table 3-2. This is partly due to the overall strength of the economy in the Sacramento metropolitan area in general, and south Placer County in particular, and also to the preference by many households to live near the Sierra foothills. As housing prices continue to rise, however, a certain segment of the population will be priced out of the housing market. Given the significantly lower housing prices in Linda, it would seem that a number of households having at least one wage earner working in the growing employment centers of south Placer or north Sacramento Counties, who also desire to own their home, would be willing to commute from East Linda.

Long-distance commuting from home to work is inefficient and undesirable for a number of reasons, and is therefore not encouraged. In reality, however, a fair amount of Yuba County residents already commute to the Sacramento metropolitan area and other regions outside Yuba County, as shown in Table 3-6, and the number is likely to increase. Local realtors estimate that anywhere from 20% to 50% of those recently purchasing homes in the Yuba City/Marysville/Linda area commute out of the area to work, mostly to the Sacramento or Roseville areas. The reasons given for this willingness to commute are primarily the desire for more affordable housing or to live in a "small-town" environment while retaining a higher-paying job.

Statistics from the 1975 Special Census and the 1980 Census showed that an increasing percentage of Yuba County residents were working outside the county. The number of Yuba County residents who were employed in the county declined from 76.4% in 1975 to 73.4% in 1980. There was also in increase in the number of residents who traveled from Yuba County to Sutter County for work. In 1975, 16.2% worked in Sutter County; in 1980 it was up to 17.6%. Although there are no figures for place of work after 1980, estimates can be made based on past trends and recent and future regional job growth. Table 3-6, on page 3-13, shows past statistics as well as estimates for where Yuba County residents currently work or will likely work in the future.

TABLE 3-6

Place Of Work For Yuba County Residents

Place of Work	1975 %	1980 %	1989 % (Estimated)	2000 % (Estimated)
Yuba County				
Marysville	28.7	29.3	28.3	26.8
Beale AFB	29.0	28.6	28.8	28.8
Linda/Olivehurst	7.7	6.6	6.2	6.1
Rest of Yuba County	11.0	8.9	6.8	5.5
Yuba County Total	76.4	73.4	70.1	67.2
Outside Yuba County				
Sutter County	16.2	17.6	18.9	19.8
Sacramento County	1.6	2.3	3.2	4.3
Butte County	0.9	1.6	1.7	1.7
Other (Placer, Nevada Yolo, etc.)	4.0	4.2	5.3	6.4
Out of State	0.9	0.9	0.8	0.6
Outside Y.C. Total	23.6	26.6	29.9	32.8

Source: SACOG Regional Census Data Center, 1975 Special Census; U.S. Bureau of the Census, 1980 Census of Population and Housing, Census Tracts, Yuba City, CA SMSA; Wade Associates.

It is expected that the percentage of Yuba County residents employed in their own county will continue to decline gradually as job growth in other counties, especially Sutter, Placer and Sacramento, continues to outpace that of Yuba County, while at the same time, housing prices in Yuba County become increasingly affordable relative to prices in those other counties. Thus, a fair number of new households will choose to live in Yuba County and commute to a greater selection of higher-paying jobs elsewhere. The number of households who will do so is difficult to predict, however, so these estimates are only educated guesses. It is anticipated that the rate of decline in the number of Yuba County residents working in Yuba County will slow in the late 1990s as local job growth accelerates.

3.3 Housing Market Determination

Given the projected job and population growth in Yuba County (30,000 over the next 20 years), approximately 11,500 new housing units will be needed, assuming an average household size of 2.60. It is likely that approximately 30% of this growth will occur in East Linda, thus 3,450 housing units will be required to meet the expected need. The East Linda Specific Plan proposes

6,014 dwelling units, intended to house an ultimate Plan area population of approximately 15,580 people. Full build-out of the Plan area is anticipated to take 25 to 30 years, although the pace at which development occurs will depend on the health of the local, regional and national economies.

The Specific Plan proposes a mix of housing types and densities which reflect the market for essentially three types of housing in the area: 1) the standard three bedroom 1,500 square foot single-family dwelling on a 6,000 square foot lot; 2) a custom or semi-custom 2,000 square foot house on lots of one-half to two acres in size; and 3) apartments.

The market for the typical single-family home is by far the strongest, hence the greatest percentage of residential land in the Plan area is designated for single-family housing at 3 to 5 dwelling units per acre. This kind of single-family housing in East Linda will have to compete with the housing being constructed in the Yuba City area, and although Linda is not considered as desirable a place to live as Yuba City, its image will improve as new development occurs in compliance with the Specific Plan design guidelines, and housing prices remain lower than in Yuba City. Prices for these homes will likely range from $75,000 to $120,000 at today's prices.

The market for semi-custom or custom homes on large lots, though limited, will likely remain strong due to the number of people preferring a larger lot in a semi-rural environment, especially at a lower cost. As land prices in south Placer, west Nevada, and north Sacramento Counties continue to rise, large residential lots in East Linda will become more attractive. A fair amount of residential land has been devoted to these very low residential densities in the Plan area, and is primarily located at the eastern end of the Plan area abutting agricultural lands. It is intended that the lower densities will serve as a transition from the more intense urban area of Linda to the open agricultural areas. A home of this type on a one acre lot is expected to cost from $120,000 to $150,000 at today's prices.

The third housing market, for higher density apartments, is also fairly strong due to the need for lower cost housing. Approximately 1,100 units (18.6%) of the total dwelling units in the Plan area will be multi-family housing. Rents for these apartments will likely range from $300 to $500, except for any luxury units, which would have higher rents.

3.4 Density Bonus Program

The County may assign additional residential units to specific projects in the Specific Plan, in excess of the designated densities, for the purpose of obtaining affordable housing units. This "density bonus" will assist the County in meeting its affordable housing goals by allowing developers to build extra units, thereby reducing the average development cost of

individual projects. Such density bonus units will be assigned to individual projects by agreement between the developer and the County, on a case-by-case basis. The number of bonus units shall be equal to the number of affordable units (very low/low/moderate income). For example, if a developer of a 50-unit project agrees to provide five affordable units, he or she would be awarded a density bonus of five units, thus the final project would contain 55 dwelling units.

4. CIRCULATION ELEMENT

The comprehensive circulation system is designed to provide a range of transportation options for safe and efficient movement of people throughout East Linda. The circulation system incorporates public streets, pedestrian paths, bikeways, parking areas, and future public transit stops in conjunction with a concept of overall land use and transportation system management (TSM) methods.

4.1 Primary Vehicular Circulation

Automobile transportation will remain the major mode of circulation for most Linda residents in the forseeable future. The existing network of streets will be expanded and enhanced to provide for the future movement of vehicles within and beyond the Specific Plan area. The circulation system is intended to expedite vehicle movement while minimizing impact on adjacent land uses. All streets are planned and will be built to accommodate the intensity of land uses they serve, consistent with the level of development as specified in the Land Use Map.

The Plan describes three classes of public streets based on function and ultimate width: major arterial, collector and local. Local neighborhood streets will be designed within individual projects pursuant to the adoption of this Specific Plan and, therefore, are not designated in the Plan, with the exception of those streets already developed within the Plan area such as Alberta Avenue. Additionally, the extensions of Rupert and Oakwood Streets are designated on the Land Use Map to show how they will connect with proposed collector streets within the Plan area. The extensions of these neighborhood streets are not intended to carry substantial volumes of traffic, nevertheless, through access has been identified by the Yuba County Planning staff as an important goal in the overall circulation plan for the East Linda Specific Plan.

4.1.1 Existing Street System

The East Linda Specific Plan area is linked to other portions of Linda and Yuba County via a number of existing arterial and collector streets. These links, illustrated on Figure 4-1, East Linda Circulation Network Diagram, include North Beale Road, Hammonton Smartville Road, Erle Road, Linda Avenue and Simpson-Dantoni Road. The current road system serves an estimated Plan area population of 980 residents in addition to some small commercial developments. The major roads, however, are currently used by a large amount of pass-through traffic generated from outside the Plan area. This pass-through traffic is generally confined to North Beale Road, Hammonton-Smartville Road, Erle Road and Griffith Avenue.

Figure 4-1
East Linda
Circulation Network Diagram

Primary access into the Plan area is currently via North Beale Road, which feeds into State Highway 70, linking Linda to the cities of Marysville and Yuba City to the north and northeast, and to Olivehurst to the south. North Beale also serves to link Linda with the main gate of Beale Air Force Base, located six miles to the west.

Erle Road, located along the southern boundary of the Plan area, is currently a two-lane collector road linking East Linda, via Griffith Avenue at its eastern perimeter, with West Linda, to the west of Highway 70 and the Southern Pacific Railroad. Development of the Specific Plan will require upgrading of Erle Road to a four-lane limited-access arterial. Planners at Beale Air Force Base have indicated that Erle Road is being considered as an alternative to North Beale Road as the main gate to the base, though no decision has been reached as yet.

Hammonton Smartville Road traverses the northern portion of the Plan area, linking Linda with the north entrance to Beale Air Force Base as well as the foothill communities of Nevada City and Grass Valley via Highway 20. Simpson-Dantoni Road runs along the northern Plan area boundary, connecting Simpson Lane out of Marysville with Dantoni Road which follows the Yuba River levee to the northeast. Linda Avenue is a two-lane collector street running northwest from North Beale Road at Yuba College to Hammonton Road (before it junctions with Simpson Lane to become Hammonton Smartville Road).

Griffith Avenue, which runs north-south through the eastern portion of the Plan area from Hammonton Smartville Road to Erle Road, is a two-lane country road lined with a number of ranchettes and small homes, some of which are located less than 20 feet from the roadway. The street is frequently used as a collector by large trucks wishing to avoid going through Linda via North Beale Road and instead travelling on Erle Road west to Highway 70.

A detailed description of the existing street system within the Plan area is provided in Table 4-1.

4.1.2 Major Arterial Streets

The primary function of the major arterial streets is to move large volumes of traffic through the Plan area to other sections of the community and beyond. Within the Plan area, arterials will be limited access roadways with minimal cross traffic turning movements. Connections of local streets to arterials will be minimized to discourage congestion and safety hazards associated with through traffic. The arterials in the Plan area are designed with an 84-foot right-of-way that incorporates four travel lanes, bike lanes, and curb and gutter. A pedestrian walkway is incorporated in the adjacent

TABLE 4-1
Existing Street System Informaton

Street	Location	Number of Lanes Travel	Turn	Parking	Paved Width	Traffic ADT	Volume Year of Count	Capacity Pk. Hr. One-Way	V/C Ratio	LOS
Alberta Ave.	N. Beale/Hmntn-Smtvl	2	0	2	21	1500	*	400	0.26	A
		2	0	0	40	1500	*	400	0.26	A
Dantoni Rd.	Hmntn-Smtvl/north	2	0	0	22	100	*	200	0.04	A
Erle Rd.	High 70/Bypass	2	0	0	24	2000	1988	600	0.23	A
	Griffith/east	2	0	0	22	800	1986	400	0.14	A
Griffith Ave.	Erle/Hmntn-Smtvl	2	0	0	22	1435	1986	400	0.25	A
	Hmntn-Smtvl/north	2	0	0	22	100	*	400	0.02	A
Hammonton-Smartville Rd.	Simpson/Griffith	2	0	2	24	6000	*	600	0.70	C
	Griffith/east	2	0	0	24	4460	1986	600	0.52	A
N. Beale Rd.	from west/Lowe	4	1	2	76	18887	1986	1800	0.73	C
	Lowe/Hmntn-Smtvl	4	1	2	76	18641	1986	1800	0.72	C
	Hmntn-Smtvl/Linda	4	1	2	76	12900	1988	1800	0.50	A
	Linda/east side Y.C.	4	1	2	76	12900	1988	1800	0.50	A
	Yuba College/Alberta	2	1	2	36	7500	*	700	0.75	C
	Alberta/Griffith	2	0	2	40	7000	*	700	0.70	C
	Griffith/east	2	0	2	22	6000	1989	700	0.60	B
Simpson-Dantoni Rd.	Dantoni/west	2	0	0	22	400	*	700	0.04	A

* No counts are available, so the numbers given are estimates

Source: Yuba County Public Works Department; Lowell & Associates

landscaped corridor. Additional right-of-way will be designated at key points for bus turnouts in the event bus service is provided in the future.

The arterial and collector streets have been planned to provide for a level of service (LOS) C or better (assuming the Route 70 Bypass is constructed by the time buildout of the Specific Plan occurs). LOS is a measure of a road or intersection capability to handle varying quantities of traffic at different comfort levels with respect to their capacity, and is generally shown with a rating of A to F, with A representing unrestricted free-flowing traffic, and F representing congested, totally obstructed traffic movement.

The alignment of major arterials and collector streets is illustrated on the East Linda Circulation Master Plan, Figure 4-2. The right-of-way, number of lanes, and the width of the landscape corridor is summarized in Table 4-2. The future traffic and level of service (LOS) projections for arterial and collector streets at Specific Plan buildout are shown in Table 4-3. These projections were calculated by applying the trip generation rates contained in the Transportation and Engineering Handbook, 1982 Edition, to the land uses set forth in the East Linda Specific Plan. The trip generation rates by land use type are detailed in Appendix B.

TABLE 4-2
Summary Of Vehicle Lanes On Arterial
And Collector Streets

Road Link	Ultimate Lane Capacity	ROW Width	Street Width	Landscape Corridor Width
Arterials				
North Beale Road	4	84'	72'	15-25'
Erle Road	4	84'	72'	25'
Hammonton Smartville Road	4	84'	72'	20'
Collectors				
Griffith Avenue	2	52'	42'	10-15'
Dantoni Road (between Hmtn-Smtvl. and Erle Roads)	2 (or 4)	60'	52'	20'
Dantoni Road (between Simpson-Dantoni and Hmtn-Smtvl. Roads)	2	60'	42'	10'
Street "A"	2-4	76-100'	46'	27'
Street "B"	2	65-78'	52'	--*
Rupert Avenue	2 (or 4)	62'	62'	12'

* Most of Street "B" is proposed to be fronted by homes, and thus will not have a designated landscape corridor easement. The street will instead have an 8-foot planting strip and 5-foot sidewalk on each side.

Figure 4-2
East Linda
Circulation Master Plan

TABLE 4-3
Future Street System Traffic Projections and Roadway Types at Buildout

Street	Location	Roadway Type	Lanes	Traffic Volume ADT	Capacity Pk. Hr. One-Way	V/C Ratio	LOS
Alberta Rd.	N. Beale/Hammont-Sm	Local	2	3600	700	0.30	A
Dantoni Rd.	Erle/N. Beale	Collector	2 (or 4)	26900*	700 (or 1800)	0.88	D
	N.Beale/Hammonton-Sm	Collector	2 (or 4)	22400*	700 (or 1800)	0.73	C
	Hammonton-Sm/north	Collector	2	11000*	700	0.86	D
Erle Rd.	High 70/Bypass	Arterial	4	27000*	1800	0.88	D
	Bypass/Griffith	Arterial	4	11100	1800	0.36	A
	Griffith/east	Arterial	2	6600	700	0.55	A
Griffith Ave.	Erle/N. Beale	Collector	2	4800	700	0.40	A
	N.Beale/Hammonton-Sm	Collector	2	7000	700	0.59	A
	Hammonton-Sm/north	Collector	2	4500	700	0.38	A
Hammonton-Smartville Rd.	Simpson/Dantoni	Arterial	4	15100	1800	0.50	A
	Dantoni/Bypass	Arterial	4	21800	1800	0.71	C
	Bypass/Griffith	Arterial	4	18800	1800	0.62	B
	Griffith/east	Arterial	2	9000	700	0.76	C
Street "A"	Erle west/Rupert	Collector	4	22000	1800	0.68	B
	Rupert/Erle east	Collector	2	13000	700	0.92	E
N. Beale Rd.	Linda Ave/Griffith	Arterial	4	28000*	1800	0.91	E
	Griffith/SP east boundary	Arterial	4	19500	1800	0.61	B
	SP boundary/east	Arterial	4	14000	1800	0.39	A

* These traffic volumes will be lower when the Route 70 Bypass is constructed. If the Bypass is not built, the level of service on Dantoni Road and the western segments of N. Beale and Erle Roads will be "E" or "F", consequently, additional travel lanes may be necessary.

Source: Lowell & Associates

North Beale Road will continue to serve as a major arterial, linking the Plan area to the existing community of Linda and Beale Air Force Base, and Marysville and Yuba City beyond. The street will be improved to an 84-foot right-of-way, with four travel lanes. North Beale Road will intersect Dantoni Road, the proposed Highway 70 Bypass, and Griffith Avenue.

Erle Road will be expanded from its present two lanes to four, with an 84-foot right-of-way, between Highway 70 and Griffith Avenue. At present, property along the length of Erle Road is undeveloped except for a few ranch houses along its southern edge, outside the Specific Plan area. Erle Road will intersect the new collector street (Street "A") extending south from the intersection of Rupert, as well as the Dantoni Road extension, Highway 70 Bypass, and Griffith Road. As the Plan area develops, Erle Road will grow in importance.

Hammonton Smartville Road will also be expanded from its present two lanes to four, with an 84 foot right-of-way, between its junction with Simpson Lane and Griffith Avenue. The road will continue to serve as a primary linkage to Marysville-Yuba City to the northwest, and the foothill areas to the east.

Major arterial streets in the Plan area will include landscaping in corridors along the streets where feasible. Such landscaped setback areas adjacent to major arterials may be incorporated within the public right-of-way width and are an integral part of the designated streets. The character of these landscaped corridors is illustrated in Figure 4-3, Typical 4 Lane Arterial, and described in Section 8, Urban Design Guidelines.

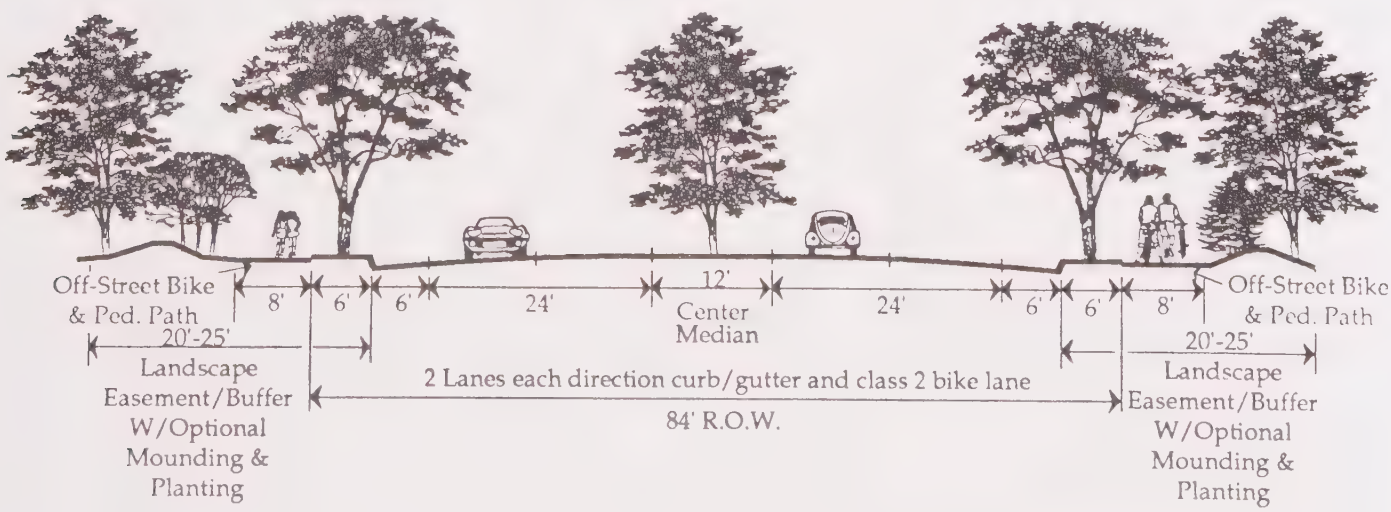


Figure 4-3
Typical 4-Lane Arterial

The landscape corridor is measured from the back of the curb, and therefore includes land within the public right-of-way and an easement over adjacent private lands. The portion of the landscape corridor beyond the public right-of-way and adjacent to single family residences, shall be dedicated to the County for landscaping purposes. The width of each street pavement section and the right-of-way determines the actual width of the easement. Landscape corridors will be expanded at intersections to allow for adequate lines of sight, as illustrated in Figure 4-4, Setback at Intersections. Noise buffering techniques, such as landscaping, berms and acoustically designed walls may be utilized to attenuate noise impacts on residences adjacent to arterial streets.

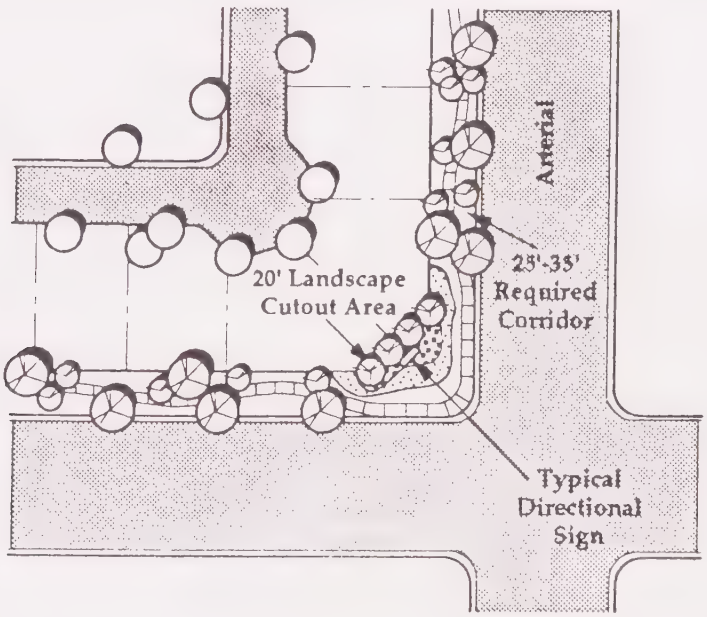


Figure 4-4
Setback at Intersections

4.1.3 Collector Streets

Collector streets will generally be designed with two travel lanes, bike lanes, curb and gutter, and pedestrian sidewalks as illustrated in Figure 4-5, Typical 2-Lane Collector Street. The main collector streets will include Griffith Avenue, Dantoni Road, and the street which loops off of Erle Road (Street "A"). Lesser collector streets, which will function more as local streets, are the new streets "B" and "C".

Dantoni Road will become an important north-south collector within the Plan area, extending from its present alignment past Hammonton Smartville Road and south to Erle Road. Dantoni Road will be constructed with a 60-foot right-of-way and two travel lanes in Phase 1.

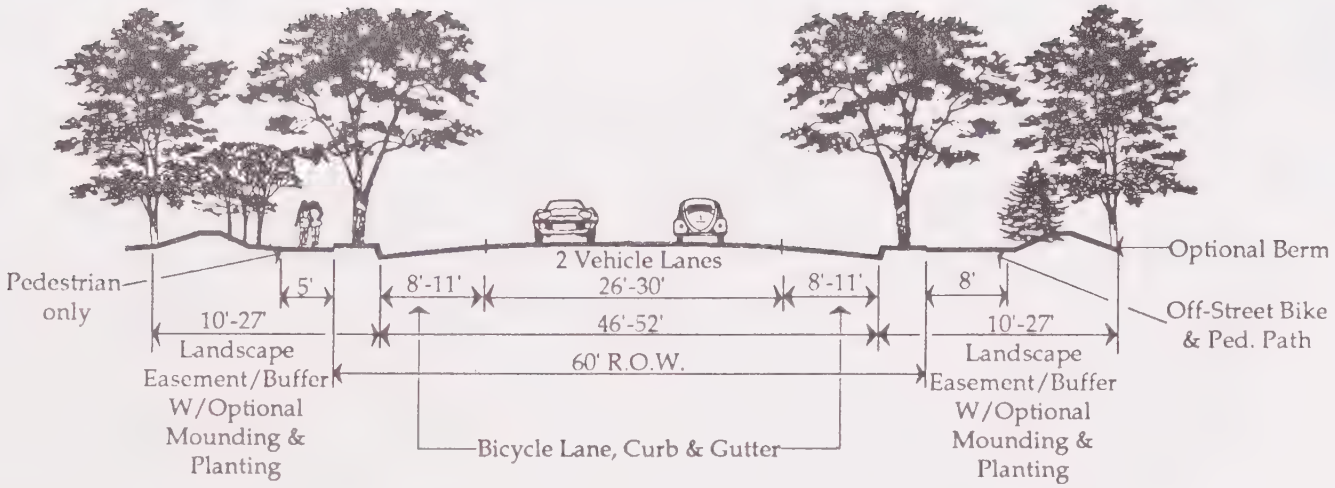


Figure 4-5
Typical 2-Lane Collector Street

It is intended that Dantoni Road will accommodate a portion of the pass-through traffic burden now plaguing Griffith Avenue, but it is not intended to become the major north-south route within East Linda; that role will be served by the future Route 70 Bypass. The Bypass must be constructed in order for the land use densities proposed in the Specific Plan to be feasible. If the Bypass is not constructed by the time buildout occurs, the projected level of service on two-lane Dantoni Road will be "F", consequently, Dantoni Road would have to be widened to four lanes in order to handle the traffic volumes. Four lanes could be accommodated within the 60-foot right-of-way, with a paved width of not less than 52 feet.

Griffith Avenue is a special case due to its substandard width and the fact that a number of properties fronting it are currently developed with homes which are located quite close to the roadway, in some cases less than 20 feet. Some segments of Griffith Avenue have a right-of-way width as narrow as 30 feet, while for most of its length the paved roadway is only 22 feet wide, narrower than a standard local residential street. It is intended as part of this Specific Plan that the portions fronted by vacant, developable parcels will be improved to an ultimate roadway width of 40 feet when those properties are developed.

Over the long term, as development in the area occurs, it is likely that some of the older houses along Griffith Avenue will be demolished and their properties developed at the Specific Plan densities. In the meantime, those stretches of Griffith already fronted by homes will not be widened unless it becomes absolutely necessary, in which case the County will be required to take the front portions of properties by eminent domain. This will likely

result in the removal of a limited number of homes, in which case their owners would be compensated by the County.

Two lesser collector streets, "B" and "C", will function primarily as local streets, except that they will be constructed to collector street standards. Street "B" will extend from Street "A" to Dantoni Road, and will have a right-of-way from 65 to 78 feet wide (the 78-foot ROW will extend along that portion of the street that will be fronted with single family homes, in order to accommodate a 13-foot landscape strip and sidewalk on each side, whereas the portion of Street "B" adjacent to the multi-family development will have a ROW of 65 feet, because the landscape corridor will be an easement across that property.

Street "C" will extend from Hammonton-Smartville to North Beale Road, along the east Plan area boundary, parallel to Griffith Avenue. Street "C" is intended to relieve traffic pressures on Griffith Avenue.

Rupert Avenue will extend from North Beale Road to Street "A". Rupert is intended initially to be a 2-lane collector with the potential of being widened to 4 lanes, should the Route 70 Bypass be delayed or deferred.

4.1.4 Local Streets

The local streets serve to provide access to the home sites that abut them, and to provide a corridor for Class III bikeways and for the pedestrian walkways that flank them. The streets are located in the residential neighborhoods, and are purposely not designed or designated in the Specific Plan in order to provide design flexibility at the time of tentative subdivision or planned development map submittal. Design guidelines and development policies for the street layout are specified in this section, and in Section 8, the Urban Design Element.

4.2 Route 70 Bypass

A bypass has been proposed for State Route 70, the route connecting Sacramento with Marysville and Chico, in order to divert through traffic around downtown Marysville. At present, all vehicle and truck traffic travelling between the Sacramento-Roseville area and the cities of Oroville, Chico, and Paradise must pass through downtown Marysville. This traffic is expected to increase substantially over the next decade, worsening congestion and safety problems already plaguing Marysville. As a solution, the City of Marysville, County of Yuba, and the Sacramento Area Council of Governments initiated a study to evaluate the need for such a bypass, as well as make recommendations on alternative alignments for the bypass.

The study concluded that a bypass was necessary, and that the preferred alignment was a route that would extend from the intersection of Routes 65 and 70 east of Olivehurst, north through East Linda approximately 1,200 feet west of and parallel to Griffith Avenue, then turning northwesterly at the Yuba River toward existing Route 70 north of Marysville. Subsequently, the Yuba County Planning Commission and Board of Supervisors conducted public hearings and, on August 22, 1988, the Board of Supervisors amended the County's General Plan Circulation Element by incorporating the recommended alignment of the Marysville-State Route 70 Bypass. The exact route alignment has not yet been adopted by Caltrans, nor has funding been approved, and the construction date has not been determined.

The bypass poses both constraints and opportunities for development within the East Linda Specific Plan area. The constraints include noise and air quality impacts resulting from increased through traffic, especially to properties located along the proposed alignment. The bypass will further break up areas into smaller components, making land use planning more challenging.

On the other hand, the Route 70 bypass will serve as a major north-south artery, serving East Linda and easing some of the through traffic now using Griffith Avenue. Construction of the bypass is essential to development of the eastern portion of the Plan area, otherwise a significant amount of future traffic would be directed to the Erle Road interchange with existing Highway 70, resulting in potentially severe congestion. The bypass must be constructed in order to maintain a LOS C within the Plan area at buildout. In addition, the bypass will reduce air pollution by decreasing "stop and go" traffic through Marysville.

The highway is anticipated to be at-grade, and initially have two travel lanes, with two additional lanes provided as the need arises and funds are available. The total right-of-way will be 210 feet in width. The bypass will likely have intersections at Hammonton Smartville Road, North Beale Road and Erle Road. Although there are no plans for the engineering and design of the bypass as yet, it is possible that at buildout, one or more of the three intersections with the bypass will be urban interchanges, employing grade separations.

4.3 Bikeways/Pedestrian Pathway

Bicycles and walking provide alternative transportation modes that people will use if destinations are not too far and they can proceed in relative safety. Children and bicycle enthusiasts make extensive use of bicycle trails for recreation and transportation.

The Plan provides a system of bikeways and pedestrian pathways for recreation, commuting and other non-recreational purposes. The system consists of three key elements organized in a connected hierarchy of pathways designed to take a resident from their front door to an inter-community network. The natural drainageways lend themselves to a pedestrian and bicycle circulation system. Pedestrian and bicycle paths will be incorporated into dedicated public access easements along the Linda Creek drainage corridor. The backbone bicycle/pedestrian system is illustrated in the Bikeway Master Plan, Figure 4-6.

4.3.1 Primary or "Backbone" Network

The primary system consists of two key components, the Class I bike paths along major arterials, and Class I bike paths through the power line easement corridor and along the floodway of Linda Creek. The components form a network that allows a cyclist or pedestrian to travel east and west, north and south through the Plan area along a separate trail system with only minimal street/pathway intersections. A cyclist need travel not more than a few blocks within a residential neighborhood before connecting with a designated bike path that will connect to other areas throughout East Linda.

Arterial streets that provide a Class I bike path include Erle Road, North Beale Road (east of Linda Avenue), and Hammonton Smartville Road (east of the PG and E powerline). The Class I bike paths consist of slightly undulating paved, 8-foot wide path, totally separated from the street edge by landscaping within the landscaped corridor as illustrated in Figure 4-3, Typical 4-Lane Arterial. The pathways will be sufficiently wide to accommodate both pedestrians and cyclists, but the cyclists will also be able to the use the Class II bike lane in the curb lane along both sides of the boulevard. Bikeways are intended to provide a safe and convenient route for commuting cyclists at a reasonable speed. Consequently, the alignment of the route should not vary so greatly that the safe and convenient movement of cycle traffic is inhibited.

4.3.2 Secondary or Collector Path System

The Class II bike lane system extends throughout the Plan area within the right-of-way of collector streets and arterials, as illustrated in Figure 4-5. The bike lanes will be five to eight feet wide, located adjacent to the travel lanes and marked by signage and a stripe on the pavement marking the edge of the lane. A Class II bike lane will be provided on both sides of all collector and arterial streets. It is intended that cyclists en route to a specific destination will use the Class II bike lane in the street rather than the Class I bike path that is shared with pedestrians.

Figure 4-6
Bikeway Master Plan

4.3.3 Tertiary Bikeway System

All local streets within the neighborhoods will serve as Class III, on-street bikeways. The land use policies specify a land use pattern that facilitates access from the interior of neighborhoods to the secondary and primary bikeway system. The neighborhoods are also to be designed to restrict through vehicular traffic, thereby making the streets safer for cyclists. The soundwalls which separate single family residential neighborhoods from adjacent arterials should be penetrated at distances of not greater than 600 feet to allow a cyclist or pedestrian direct access from the interior of a neighborhood to the backbone system. The breaks in the soundwall will connect to interior streets via short pedestrian/bikeway paths between residential areas, and where the interior streets are adjacent to the major arterials.

4.4 Public Transit

Demand-responsive Dial-A-Ride service is the only form of public transportation provided within the Yuba-Sutter area at present, and the only form anticipated over the next several years. The HUB Area Transit Authority operated a fixed-route bus service for five years, from 1982 to 1987, but terminated service in December 1987 because of low ridership. In the meantime, HUB Area Transit will continue to provide the Dial-A-Ride service, while monitoring public transit needs to determine whether or not bus service should be resumed in the future.

HUB Area Transit presently operates a fleet of 15 Dial-A-Ride vans, providing door-to-door service used mostly by elderly, low-income and handicapped persons, and Yuba College students. Over half of the trips are made by persons 60 years of age or older, and the number one destination point is Yuba College, according to HUB Area Transit figures. The system is funded through a number of sources, including State sales tax revenues, Federal Transportation Development Act funds, fares and miscellaneous local revenues.

Development of the East Linda Specific Plan is likely to generate approximately 60 additional passenger trips per day based on HUB Area Transit ridership estimates. Transit officials have determined that the current system could absorb the projected increase in population without much impact on service. Additional vans would be purchased as the need arises.

Other mass transit such as light rail is not proposed at this time. It is recognized that overall densities and intensity of land uses in the Plan area and surrounding communities are not conducive to light rail service.

Although no other form of public transit is anticipated, it should be noted that the Southern Pacific and Union Pacific rail lines that run adjacent to the Specific Plan area on the west have the potential to provide heavy rail passenger service to Sacramento and Roseville once again as they did prior to World War II. The existence of Amtrak stations in downtown Sacramento and Roseville reinforce this potential. Such a system would require multi-jurisdictional cooperation and funding, as well as a stronger demand, however, therefore such rail service is not a likelihood in the near future.

4.5 Transportation System Management

Traffic impacts on East Linda streets could be reduced through transportation system management (TSM) measures which encourage employees to rideshare and travel at times outside of the normal peak travel periods. Based on research conducted by Caltrans, the Institute of Transportation Engineers, and Fehr & Peers Associates, implementation of ridesharing and flex time programs can reduce traffic generated by business-professional and light industrial uses from 10 to 15 percent.

Unfortunately, traditional TSM measures are usually more feasible and successful with large employment activities. Within the East Linda Specific Plan area, the employment centers are relatively small compared to the major employment centers such as the Yuba County Airport Industrial Park and other industrial areas to the south in Placer County. Moreover, the opportunities to implement conventional TSM programs are more limited in a predominantly residential area than they may be in areas of concentrated employment. Consequently, the TSM measures in this Specific Plan focus on the small steps that can be implemented here. TSM in the Plan area will include:

- provision of bike and pedestrian routes
- provision of secure bike parking at shopping areas
- participation in rideshare and other transit information distribution programs that may be offered by HUB Area Transit

4.6 Circulation Policies

4.6.1 Street System Design and Layout

1. Local streets shall be designed in a manner which is compatible with the proposed collector and major arterial street system. Intersections of collector streets with major arterials shall be kept to a minimum. Local interior residential streets should not directly intersect with major arterial streets.

2. Collector streets should not intersect with a major arterial closer than 600 feet from an intersection formed by two arterial streets, or closer than 300 feet from another collector/arterial intersection.

3. Local streets shall not intersect collector streets closer than 150 feet from intersections of collectors and arterials.

4. Access along major arterials is limited and shall be restricted to points approved by the Public Works Director.

5. Local streets within neighborhoods shall be designed to discourage through traffic.

6. Streets shall conform to natural topography and vegetation to the maximum extent possible.

7. Parking on all arterial streets will be discouraged throughout the Plan area and will be prohibited by signage in selected locations.

8. Street alignments, crossings and bridges across floodways or wetlands are to be accompanied by additional environmental analysis and shall include a revegetation and restoration plan.

9. Local streets shall be developed with a minimum 4-foot wide sidewalk on both sides of the street. Sidewalks should be separated from the curb by a minimum 5-foot wide planting strip where feasible.

4.6.2 Route 70 Bypass

1. Yuba County shall continue its efforts to obtain support and funding for construction of the Route 70 Bypass.

4.6.3 Bikeways and Pedestrian Paths

1. Class I bikeways within the landscaped corridors shall be designed to allow safe and convenient bicycling by commuters. Class I bikeways shall be a minimum of eight (8) feet in width, and shall not meander more than the distance of its width over a 100-foot run.

2. On-street, Class II bikeways of five (5) to eight (8) feet in width shall be provided on both sides of collector and arterial streets with proper signage and striping.

3. Pedestrian paths and bikeways within easements shall be designed to minimize intrusion upon private property.

4. Pedestrian paths shall be located away from the street pavement where feasible to create a landscaped environment separate from the traveled right-of-way.

5. Landscaping and grade changes shall be employed as a means of separating pedestrian paths from streets.

6. Bike paths doubling as pedestrian walks should be a minimum of eight (8) feet in width and shall be constructed of asphaltic concrete.

7. Separation of the cyclist/pedestrian from the automobile should occur whenever possible. Frequent connections form adjoining land use to the backbone bikeway system should be encouraged. Projects adjacent to the backbone system should provide points of access from the interior streets to the primary bikeway at points not greater than 600 feet apart.

8. All Class I and Class II bikeways within the landscaped corridors shall be maintained by the Lighting and Landscape Maintenance District described in Section 7, Implementation. Maintenance of Class I bikeways through public easements will be the responsibility of the County or the Linda County Water District.

9. Inter-neighborhood off-street bikeways will occur in the existing easements, and in short connecting easements between interior residential streets, and between interior residential streets and the adjacent backbone system.

4.6.4 Public Transit

1. Alternatives to the automobile as a means of transportation are encouraged. Public transportation services, such as those provided by HUB Area Transit Authority, should be expanded to the Plan area as development occurs and demand warrants.

2. Right-of-way for future bus turnouts shall be allocated as approved by the Public Works Director at the time of roadway installation.

5. OPEN SPACE AND CONSERVATION ELEMENT

At present, the East Linda Specific Plan area is characterized by an open, sparsely developed landscape, without significant topographic features other than a few very small creeks and swales, as well as man-made drainage ditches. Overall, East Linda has the feel of a small agricultural community, and in fact, some of the open fields are planted in alfalfa or feed grasses, while other properties are planted in orchards. There are also a number of one to ten acre ranchettes throughout the eastern portion of the Plan area; some of these properties have substantial gardens and/or farm animals such as horses, goats or chickens.

Urban development resulting from implementation of the East Linda Specific Plan will invariably modify this mostly natural environment. Careful community planning and care in placing and constructing urban land uses combined with judicious use of open space, however, can create a community that retains and incorporates the essential character of the natural environment.

Human habitation also places demands on community resources, such as potable water, and an increased burden on other community or regional resources, such as air and water quality and the available energy supply. It is the purpose of this Element of the Specific Plan to address the conservation and management of both the natural resources and amenities within the Plan area boundary, and the regional and community-wide resources that support urban development.

The East Linda Specific Plan is designed to conserve natural resources and mitigate, to the maximum extent possible, the impacts associated with development in the Plan area. In most instances, resource management policies have been incorporated into various elements of the Plan. The redundancy provided in this element of the Plan, therefore, serves to clarify and underscore the importance of conservation and resource management.

The resources addressed in this Element include:

- Open Space
  - Drainage Courses
  - School Playfields
  - Parks
  - Power Line Easement
  - Landscape Corridors
- Soils
- Seasonal Wetlands
- Water Quality

- Air Quality
- Energy Conservation
- Historic Preservation

Conservation and resource management issues tend to encompass multiple objectives and an approach to one issue often benefits other concerns. In this Specific Plan the land use, circulation system, open space, recreation and other public facilities all support the complex objectives of maintaining natural amenities in an urban setting, and of minimizing negative effects on air quality, water quality, energy demand, and the natural and historic resources in the area.

The following sections describe each of the resource categories, the concept for their use and protection, and the policies to implement these concepts.

5.1 Open Space

Open space is an important land use which accommodates both active and passive recreation needs, provides visual amenity, and defines the boundary of the developed areas. Open space also serves to conserve and protect certain other resources, and to meet other needs within the community.

Open space within the East Linda Specific Plan area can be categorized as "primary" or "secondary" depending upon the extent of the area and the primary function of the space. Primary includes the parks, open playfields of school sites, stream courses, as well as portions of the area within the power line easement not designated for other uses. Primary open space is summarized by category in Table 5-1. A total of 135.5 acres, approximately 7.0 percent of the total Plan area, will be left in primary open space, or limited development areas. This provides 8.69 acres of open space land per 1,000 people within the Plan area.

TABLE 5-1

Summary Of Primary Open Space

Open Space Use	Acres
Community Park	40.0
Neighborhood Parks	35.2
School Playfields and Grounds	40.3
Power Line Easement/Floodways	20.0
Total Primary Open Space	135.5

Secondary open space includes areas that serve other functions, such as circulation. Examples include linear parkways, pedestrian connectors within neighborhoods, and landscape corridors along major arterials.

Linear open space areas, consisting of the drainage easement/parkway, power line easement, and landscaped corridors along arterial and collector streets, will be a dominant feature of the urban setting in the Plan area when it is fully developed. The drainage and power line easements will establish a strong perception of the separation of urban areas from one another, and the inclusion of a prevalent natural environment within the community. This open space, along with the arterial streets, plays an important role in defining the bounds of the residential neighborhoods, a primary feature of the East Linda Specific Plan land use pattern.

5.1.1 Drainage Courses

The floodway and drainage systems within the Specific Plan will be enhanced and enlarged to provide runoff detention basins in appropriate locations in order to prevent additional runoff accumulations from impacting already overburdened downstream drainage facilities. It is intended that these detention basins and significant portions of Linda Creek will be dedicated to Yuba County as permanent open space for both flood prevention as well as passive recreation purposes.

A linear 100-foot-wide floodway/recreation easement will extend from the southwest corner of the community park site south along the west side of Yuba College and on to Erle Road, then west along the north side of Erle to the point where the Linda Drain now transects Erle. From that point, the Drain continues south away from the Specific Plan area. This floodway/ recreation easement will remain in a generally natural condition and will include detention ponds for holding excess runoff until downstream drainage systems can accept it, as well as pedestrian and bike trails linking the various neighborhoods within the area.

Smaller floodway/recreation easements of 50-feet in width will follow the Linda Drain upstream from the high school site, as well as the Olivehurst Drain in the eastern part of the Plan area. Approximately 20 acres are designated as floodway with recreational use within the Plan area, not including the floodways or detention basins located within the community park and high school.

Storm drainage is further discussed in Section 6, the Public Facilities and Services Element.

5.1.2 School Playfields

A total of 80.6 acres of land are designated for school sites. Approximately one-half of each school site will include turf and hard-surface areas which will constitute an element of open space within the Specific Plan area. While intended primarily for use by school children, the playgrounds and fields may be used by surrounding residents during periods when the schools are closed. In addition to providing space for recreation, school sites contribute a sense of openness in areas of higher residential density. The schools sites are located adjacent to community or neighborhood parks that will accommodate joint community and school district use of recreation facilities.

5.1.3 Parks

The East Linda Specific Plan includes five parks with a combined total of 75.2 acres. The four parks include a 40-acre community park, through which the Linda Creek floodway passes, and four smaller neighborhood parks of 8.0 to 9.4 acres. The parks are described in greater detail in Section 6, the Public Facilities and Services Element.

5.1.4 Powerline Easement

A powerline easement 100 feet in width transects East Linda from north to south for a distance of 8,700 feet, or slightly more than one and one-half miles (although it crosses the Plan area for only about half a mile). Development is precluded from this area, resulting in a greenbelt nearly 20 acres in size. Portions will be incorporated into the floodway/recreation easement or into the design of individual projects, as parking areas, private recreation space, or as common open space within residential developments.

The easement will include a pedestrian path/bikeway intended to facilitate off-street travel within the Plan area. The pedestrian path/bikeway will be incorporated in a linear parkway which will connect the designated parks with the bikeways along arterial corridors designated in the Circulation Element. (See Figure 4-6, Bikeway Master Plan.) The bikeway corridor will vary in width, but should not be less than 50 feet wide where adequate space is available.

5.1.5 Landscape Corridors

In addition to the natural open space retained in various forms throughout the Plan area are the landscaped corridors that flank the major boulevards and arterial streets. Although these corridors will be improved with landscaping, they will add to the sense of openness and the visual amenity that will be characteristic of the fully developed Plan. The corridors will provide setback buffers along the major streets of 15 to 30 feet that incorporate

a landscape of trees and ground covers. In addition, the corridors will include pedestrian path/bikeways that link the schools, parks and other open space features, and provide for alternative circulation throughout the Plan area. The bikeway and landscaping system is further discussed in Section 4, the Circulation Element, and Section 8, the Urban Design Element.

5.1.6 Open Space Management Policies

1. Open space areas shall be incorporated into all multi-family and commercial development projects.

2. Commercial, business-professional and planned development residential projects adjacent to open space shall, where feasible, merge the adjacent open space into the site design to avoid creation of distinct boundaries.

3. Whenever possible, the County shall make use of parks, drainageways and utility easements in the design of a comprehensive trail system.

4. Open spaces shall be visually and physically linked to the maximum extent possible.

5. Street and other public infrastructure improvements shall be sited so as to minimize intrusion upon open areas, particularly drainage courses.

5.2 Soil Protection

The soils within the East Linda Specific Plan area were formed in alluvium from mixed sources, characteristic of flood plain soils. The soil types represented include the San Joaquin loam, Kimball loam, Capay silty clay loam and Oakdale sandy loam (see Figure 5-1, Soils). The predominant soil type, the San Joaquin loam, is a moderately deep, well drained soil with a light brown surface layer about 4 inches thick. The upper 12 inches of the subsoil is brown loam, underlain by a brown clay layer about 9 inches thick. Permeablility is moderate to 16 inches but very slow below this depth due to the clay hardpan and, as a result, a perched water table often develops after intense winter storms. In areas with mound/swale microrelief, water ponding may occur for extended periods from December through April, depending upon rainfall amounts. These seasonal ponds are described in greater detail in Section 5.3 below.

The Kimball and Capay silty clay loams are somewhat similar to the San Joaquin loam, though less represented in the Plan area. The Kimball loam, confined to the area north of Hammonton Smartville Road and east of Dantoni Road, is a very deep, well drained light yellowish brown and pale brown loam about 16 inches thick. The upper 26 inches of the subsoil is light brown clay loam, and the lower part to a depth of 60 inches or more is very

Figure 5-1
Soils

pale brown loam and sandy clay loam. Permeability is very slow due to the dense clay loam subsoil, thus a perched water table often forms after intense rainstorms as with the San Joaquin loam.

The Capay silty clay loam unit, limited to the southern drainage of Linda Creek just south of the existing developed area of East Linda, is a deep, moderately drained soil about 8 inches thick, underlain by a grayish brown silty clay about 8 inches thick. A silica cemented hardpan at a depth of 40 to 60 inches severely restricts permeability of this soil, thus perched water also occurs after heavy rainstorms.

The San Joaquin, Kimball and Capay loams are all characterized by low permeability, perched water tables, and low erosion potential, and are well-suited to irrigated crops, particularly rice. The very slow permeability and high shrink-swell potential of these soils, however, necessitate special design and site preparation measures for urban development. Because of the restrictive clay layers, on-site sewage disposal systems often fail or do not function properly during periods of high rainfall, therefore it is vital that adequate sewage systems be installed for all future development, especially as residential densities increase over time. Buildings should be designed with the proper foundations and footings, and site drainage systems should be designed to divert runoff away from buildings to prevent structural damage due to soil shrinkage and swelling.

The fourth soil type represented, the Oakdale sandy loam, is generally found in scattered locations throughout the Plan area on long, narrow rounded ridges two to ten feet higher than the surrounding landscapes, interspersed among the San Joaquin loam. This soil is very deep and well drained, with a yellowish brown sandy loam surface layer about 9 inches thick, and a brown sandy loam subsoil about 44 inches thick. Unlike the other three soils described above, the Oakdale unit is highly permeable, has few limitations, and is well-suited to residential and other development. Erosion potential is higher, however, the areas within the Plan area are essentially level, thus erosion is not likely to be a problem.

5.2.1 Soil Protection Policies

1. Specific erosion control measures shall be adopted for all development plans. These measures shall include, but not necessarily be limited to, seeding of graded areas and watering during grading activities to reduce wind erosion.

2. Soil exposed in grading operations shall be promptly replanted with native compatible, drought resistant vegetation or comparable plant materials.

3. Site grading for structures and streets shall be controlled. The natural drainage channels shall be preserved in the development of projects to the maximum extent possible.

5.3 Seasonal Wetlands

Seasonal wetlands occur where natural depressions exist in soils containing a hardpan or other impermeable layer. The depression retains rainwater or surface drainage longer than the adjacent ground surface and, consequently, the pooled water may support rare and unusual fauna and flora in the spring as the accumulated water evaporates.

The southern portion of the East Linda Specific Plan area contains a number of minor seasonal wetlands, concentrated primarily in the area south of the Country Club Park tract and north of Erle Road. This area is vacant, and has been used for pasture and irrigated farming over the past several decades and, as a result, the soils and natural vegetation have been disrupted repeatedly. A wetland field investigation of the area identified the existence of a number of small seasonal wetlands, totalling approximately 2.7 acres. The majority of wetlands were determined to be of low value as a result of intensive agricultural use (i.e. discing and leveling). Thus, although ponding of water still is likely to occur after periods of heavy rainfall, the seasonal wetlands appear to be marginal in terms of U.S. Army Corps of Engineers wetland criteria and habitat value. Nevertheless, many of these wetlands may be subject to Army Corps of Engineers jurisdiction under Section 404(b)(1) of the Clean Water Act.

It is recommended that a rare plant survey be conducted by a qualified plant ecologist prior to approval of any development plans within the Plan area. The survey should take place in the spring when most species are readily identifiable.

The area where the seasonal wetlands appear to be the most concentrated has been designated as a 9.1-acre neighborhood park. In the event that the survey and analysis by the plant ecologist indicates the presence of rare plant species, the County may take steps to protect at least some of those wetlands where feasible by requiring that a portion of the park be set aside as a wetland preserve. In addition, any development that will occur pursuant to this Specific Plan within the wetland areas will likely be subject to a Section 404 permit issued by the Army Corps of Engineers.

5.3.1 Wetland Protection Policies

The following wetland protection and mitigation policies are suggested for implementation if the survey by the plant ecologist should reveal the

existence of high-quality wetlands or vernal pools. If so, these policies should be incorporated as a condition of approval for any project, including roadways or other infrastructure, adjacent to any potential wetland preserve:

1. A chainlink fence shall be installed along the boundary of the wetland preserve prior to construction, grading, movement of material or machinery onto the site, approval of improvement plans or the issuance of any permits. The fencing shall not be removed until the completion of the construction activity. Written release from the Planning and Building Services Department must be received prior to the removal of any fencing. No activity of any type, except for that approved by the Planning Commission, shall occur within the preserve area.

2. A minimum 12" x 12" sign shall be erected along every 50 feet of fencing or portion therof. The sign shall indicate that the area is a wetland preserve and that unauthorized trespassing is prohibited.

3. Any wetland preservation areas shall be dedicated to the County for protection and enhancement.

4. A wetland enhancement and creation plan shall be prepared by a qualified plant ecologist to direct the implementation of a specific preservation program. Any wetlands created should be on County property accessible to the general public.

5. Any parks adjacent to wetland preserves shall be designed with consideration of the recommendations of the consulting plant ecologist to preserve existing pools. In general, the following standards shall apply:

   a. The sprinkler systems must be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales must be constructed at the margins of all turfed and irrigated areas that slope toward the preserves to intercept and prevent irrigation water from flowing into the pools.

   b. No concentrated runoff may be released from artificial swale networks into any natural swale that carries water to vernal pools unless it has been treated to remove herbicides, fertilizers and excess nutrients.

   c. No alteration in existing subsurface water regimes will be permitted unless detailed site-specific hydrologic analysis indicates that the alteration would not adversely affect vernal pool water balances. Wherever the direction of groundwater flow from an irrigated area would be toward the preserve, the irrigation system must be designed

to continuously monitor soil moisture in the root zone, prevent excess watering, and automatically shut off before subsurface water movement is induced. As an alternative, a french drain may be installed to prevent subsurface flow from irrigated areas into the preserve. The hydrologic anaysis should determine whether or not water captured by the french drain must be released to the pools during the rainy season to maintain their water balances. If release is necessary, the water must be treated to remove fertilizers, pesticides and excess nutrients.

d. The County must have a plan to ensure that the facilities installed to preserve pool water balances and water quality, including permanent monitoring equipment, continue to properly perform their required functions. The plan should include regular inspection and maintenance of the facilities and equipment.

e. No mowing should occur in the preserve or in any adjacent areas of the park where turf management is not necessary.

f. Surface water runoff from any paved surface should not be directed into any intermittent tributary or swale which carries water to any wetland.

g. A low fence of wood or any other combination of materials that is visually appealing and compatible with the surrounding park features should be constructed around the preserve. The fence and pedestrian entry points should be designed to prevent access by dirt bikes and other motorized vehicles.

h. The preserve area should be signed to state its purpose and to explain the unique values of the wetland preserve.

i. Paved foot paths can be allowed in the wetland preserve. Where the design allows, these paths can cross natural drainage swales at the outlet points of pools to be enhanced by outlet barrier elevations. Where paths are used to elevate outlet barriers, provisions must be made to prevent erosion in the swales on the downstream side of the path.

5.4 Water Quality

Development within the Specific Plan area will increase the amount of impervious surfaces where soil permeability is naturally good to poor, depending on the subsoil type. The paving over of vacant land with streets, sidewalks and parking lots, and construction of numerous buildings, will result in an increase in the rate of storm water runoff. The Plan calls for the

creation of runoff detention basins to be incorporated into two of the parks and a floodway easement linking the two parks (described in Section 5.1, Open Space, above).

Water quality is of concern in areas where urban runoff is allowed to enter natural drainage courses from either rainfall or landscape irrigation. This Specific Plan establishes guidelines for the management of urban runoff through design of drainage systems and land use regulations.

5.4.1 Water Quality Policies

1. The design of paved areas should be limited to the minimum area required to meet parking standards.

2. Sediment traps, evaporation basins, and flow reduction devices and other methods to reduce the volume of grease and oil pollutants in parking area and street surface runoff shall be installed in the storm drain system in accordance with County standards.

5.5 Air Quality

Air quality in the Sacramento Valley is recognized as a significant environmental concern which influences the quality of life for all residents. Although air pollution in the Yuba-Sutter region is not as serious a problem as in larger urban centers like Los Angeles and the San Francisco Bay Area, Yuba County has nevertheless been designated as a "non-attainment" area for photochemical oxidant (ozone). The cause of the air quality problem in Yuba County is extremely difficult to quantify because a large portion of the pollutants are transmitted from the Sacramento and San Francisco Bay areas. However, the major local contributors to the air quality problem include emissions from burning of agricultural wastes, spraying of pesticides and herbicides over large agricultural areas, and motor vehicles (Yuba County General Plan Land Use Element, p. 31).

The urban development which would occur as a result of the East Linda Specific Plan would increase the amount of motor vehicle emissions within the Yuba-Sutter region, while at the same time, there would be an incremental reduction in countywide agricultural burning and pesticide emissions, since several hundred acres of pasture land and small orchards would eventually be converted to residential and commercial land uses. Although an increase in motor vehicle emissions is an unavoidable impact resulting from urban development, the location of new residential and employment areas and the spatial layout of the community can, however, play a role in the effectiveness of efforts to maintain air quality over a period of many years.

The Specific Plan establishes a land use pattern which provides housing to support nearby employment opportunities and public services. This land use pattern will help reduce automobile traffic and exhaust emissions associated with daily routines within East Linda. Retail goods and business-professional services are provided in several locations within the Plan area for the convenience of residents, allowing residents to limit the length and number of vehicle trips, thereby reducing the average daily vehicle miles traveled (VMT) throughout the community.

In addition, the Plan provides for alternative transportation modes through implementation of a Transportation Systems Management (TSM) program, also described in Section 4, the Circulation Element and Section 7, the Implementation Element. The TSM program is directed to reducing the number and length of motor vehicle trips, thereby reducing motor vehicle emissions. Due to the relatively small population of East Linda and Yuba County in general, many of the TSM measures that are applied in larger urban areas such as park and ride, vanpooling and public transit, are not feasible at this time, although if significant numbers of new residents in East Linda should work in the concentrated employment centers in south Placer County, ridesharing and vanpooling may become feasible alternatives. Other measures, however, which can be easily implemented include the provision of pedestrian and bicycle paths throughout the community, and the provision of secure bicycle parking at shopping areas, schools and public parks to allow residents to travel from home to schools, parks and shopping without the use of their autos.

5.5.1 Air Quality Policies

1. The TSM measures described above shall be fully implemented in the Specific Plan area.

2. The Yuba County Air Pollution Control Board should continue to monitor air quality, and work toward the goal of preparing an air quality plan for the region, in cooperation with Sutter County and the cities of Marysville and Yuba City. Yuba County should identify additional TSM program measures such as ridesharing, vanpooling and public transit.

5.6 Energy Conservation

The measures designed to help reduce the number and length of vehicle trips can also be effective in reducing the amount of energy required by residents and workers within the Plan area. In addition, energy conservation measures required by Title 24 will reduce heating and air conditioning requirements as well as water heating for domestic purposes. The Specific Plan establishes energy conservation policies that augment the statutory requirements.

5.6.1 Energy Conservation Policies

1. All inhabitable structures shall be designed and oriented to maximize potential for energy conservation wherever feasible. Such measures shall address, but not necessarily be limited to, utilization of solar energy.

2. Water conservation shall be encouraged through use of efficient plumbing fixtures, including flow restricting devices, and the use of native, drought-resistant landscaping. Landscape irrigation should incorporate water conserving techniques such as low precipitation spray heads and drip irrigation.

3. Trees shall be planted and maintained in all non-residential parking areas to ensure that, within 15 years of planting, at least 50 percent of the parking area is shaded at mid-day during the summer season in order to reduce solar gain.

4. Throughout the Specific Plan area deciduous trees, which aid summer cooling and allow solar gain for winter heating, shall be included and properly sited relative to all habitable structures.

5. All development projects within the Specific Plan area shall adhere to the alternative transportation programs and policies set forth in the Circulation Element of this Plan.

6. Residential streets shall be limited to the minimum width necessary for public safety to facilitate the growth of a tree canopy that will cover the street.

5.7 Historic Preservation

No structures or features of historic or architectural significance within the East Linda Specific Plan area have been identified, nor is the area known to be the site of any historic or prehistoric resources. The following policy shall apply in the event that any such resource is discovered during any phase of development within the Plan area.

5.7.1 Historic/Cultural Resource Protection Policy

1. Where test excavations or any excavation or grading work results in discovery of cultural, archaeological or anthropological resources or artifacts, all work shall halt immediately for a distance of 100 feet from the discovery site, a qualified archaeologist shall be consulted for on-site excavation, and the State Historic Preservation Office shall be notified.

6. PUBLIC FACILITIES AND SERVICES ELEMENT

A full range of public services and facilities will be provided within the East Linda Specific Plan area. These include:

- Fire Protection
- Police Protection
- Schools (Elementary, Intermediate, High)
- Recreation and Parks
- Libraries
- Waste Disposal
- Water
- Wastewater Treatment
- Storm Drainage Systems
- Electricity
- Natural Gas
- Telephone

6.1 Fire Protection

Fire protection in the unincorporated community of Linda is provided by the Linda Fire Department. The Linda Fire Station is located on Scales Avenue across from the Peach Tree Mall, and is manned 24 hours a day. The station is manned by five full-time and 30 on-call fire persons. The Department has a "mutual aid" agreement with other fire agencies so that companies from other jurisdictions may respond to fire alarms, and also an "automatic aid" agreement with the Olivehurst Public Utility District for fire protection in the Yuba County Industrial Park.

The Linda Fire Station is adequate to serve the needs of both the existing community of Linda as well as the anticipated growth within the East Linda Specific Plan area, thus no new station is proposed. If the Fire Department should determine that a new station is needed at some point in the future, there are a number of potential sites; a station could be located on North Beale Road adjacent to the community center, for example, or on Hammonton Smartville Road adjacent to the community park.

New development, however, will necessitate installation of fire hydrants and water main extensions, to be paid for by individual developers, and fees to offset costs of purchasing additional fire-fighting equipment. It is anticipated that four new fire trucks will be required, at an estimated cost of $600,000.

6.2 Police Protection

The East Linda Specific Plan area is served by the Yuba County Sheriff Department, which is responsible for providing law enforcement throughout the unincorporated areas of the County. No sheriff substations are proposed, however, as in the case of the fire station, if the Sheriff Department should determine that a substation is needed at some point in the future, there are a number of potential sites. Additional sheriff personnel and equipment such as vehicles will be required to serve the increased population.

6.3 Schools

The East Linda Specific Plan area is within the Marysville Joint Unified School District, which provides education for kindergarten through high school students. At present, there are four schools serving the Linda community, Linda and Cedar Lane elementary, Alicia intermediate, and Lindhurst High, although there are no schools within the Plan area.

The need for school facilities is determined by population trends, residential densities, proximity and size of existing school facilities, class size standards and projected enrollment. Total development of the East Linda Specific Plan will generate a total of 3,896 students. The Marysville Joint Unified School District applies a formula of one classroom/teacher for every 30 pupils in determining the number of classroom facilities needed. For purposes of this Plan, yield rates developed by the State of California were used. The results, shown in Table 6-1, indicate that a total of five new schools will be required to serve these students, three elementary, one intermediate and one high school. These schools are shown in Figure 6-1, Planned School Facilities.

TABLE 6-1

Student Enrollment Projection At Full Buildout
Marysville Joint Unified School District

		Yield Rates			Students		
Land Use	Units	K-5	6-8	9-12	K-5	6-8	9-12
Low Density (RRE to R-5)	4,399	0.35	0.16	0.24	1,540	704	1,056
Medium Density (R-6 to R-10)	496	0.27	0.12	0.18	134	60	89
High Density (R-11 to R-20)	1,119	0.13	0.06	0.09	145	67	101
TOTAL	6,014				1,819	831	1,246

Figure 6-1
Planned School Facilities

In determining the appropriate sites for the five schools, several factors had to be considered. First, the ease of access for students is of extreme importance. At present, access is a problem in East Linda due to the poor circulation pattern and dispersed development and, as a result, most children must be transported to and from school by bus, at great expense to the District.

A second factor is the PG and E power line which transects the Plan area from north to south, and the possible effects of exposure to the electro-magnetic fields emanating from high tension power lines. Although information on the effects of exposure over a period of time is not conclusive, recent studies indicate that children are more susceptible to leukemia and other diseases, therefore there is sufficient concern to justify extra precaution in locating school facilities. Consequently, all school sites within the Plan area are located to avoid the power line easement, consistent with the current State administrative guidelines.

Still another consideration is the potential for aircraft noise; the eastern two-thirds of the Specific Plan area is in the Beale Air Force Base overflight zone. On June 19, 1989 the Yuba County Board of Supervisors amended the County Zoning Ordinance by adding the Beale Air Force Base Zone. The ordinance was adopted in accordance with the General Plan Amendment (GPA 88-05), approved by the Board on December 27, 1988, incorporating the Beale Air Force Base Comprehensive Land Use Plan into the County's General Plan Land Use Element. Insofar as it applies to schools, the ordinance specifies that new public and quasi-public services and public assembly uses, such as schools, theaters, and churches may not be located on sites where the community noise equivalency level (CNEL) is greater than 65 decibels (db).

Over two-thirds of the Plan area is within the 65 db noise contours, thus it would appear that schools are restricted to only the southwest portion of the Plan area. One elementary school and one intermediate school are proposed for this area, but there is a limit to the number of schools that can be concentrated in one area. In addition, it is not appropriate to place schools too close to the Highway 70-Southern Pacific Railroad corridor due to the noise impacts from those uses. Furthermore, it is more efficient to disperse the schools so that each one will be close to at least one or more different neighborhoods.

Despite this ordinance restriction, the high school and two elementary schools have been sited within the 65 db noise contour; the sites are described in more detail below. The alternative to siting these schools within the 65 db noise contour is to place them on sites to the south of the Specific Plan area, south of Erle Road. At present, this property is zoned M-1, "General Industrial", but it may be appropriate to re-zone at least part of it to residential in order to accommodate the two schools in the event that they cannot be located with the Specific Plan area.

6.3.1 Elementary Schools

Linda School, the only existing school out of the four that is located in East Linda, had an enrollment of 918 kindergarten through 5th grade students as of September 13, 1989, well in excess of its 725-student capacity. The School District is planning to add portable classrooms to accommodate additional students for the coming 1989-90 school year. Cedar Lane School, located in West Linda, is even more overcrowded at nearly 200 students over capacity, thus another elementary school is currently needed to serve the Linda community, even without any new housing development.

The Plan designates three elementary school sites to serve the 1,819 K-5 students expected at full buildout. The first is a 10-acre site located on Oakwood Drive, just south of the County Club Park neighborhood, and will serve the Plan area south of North Beale Road and west of the Highway 70 Bypass. The school will be adjacent to a 9.1-acre park, and should be designed to accommodate 750 students.

A second 8-acre school site is located within the single-family residential neighborhood west of Griffith Avenue, east of the Highway 70 Bypass and north of Erle Road. This school should accommodate 650 students and is intended to serve the southeast portion of the Plan area.

A third elementary school site, also 8 acres in size, is located at the east end of the Plan area, on the west side of Street "C", approximately 500 feet east of Griffith Avenue and 1,500 feet north of North Beale Road. This school is also located adjacent to a neighborhood park, and should be designed to accommodate 650 students. Thus, the total capacity of the three elementary schools will be 2,050 students, more than sufficient to serve the projected 1,819 elementary school-age population in the Plan area.

6.3.2 Intermediate School

The existing Alicia intermediate school, located in West Linda, had 539 6th through 8th grade students as of September 13, 1989, and has additional capacity for approximately 150 students, although there is sufficient land to expand the school. In the short term, the construction of another elementary school would allow the District to reassign the 6th graders from Alicia to the various elementary schools, thus Alicia would handle the additional 7th and 8th grade students without difficulty. Over the long-term, however, another intermediate school is needed to serve the 831 6th through 8th grade students expected at full buildout of the Plan.

An 18.6-acre intermediate school site will be located south of Yuba College along the proposed extension of Dantoni Road. This school should be

designed to accommodate 850 students, essentially serving the 6th through 8th grade student population of East Linda, and leaving the existing Alicia School to serve West Linda and any overflow from the western portion of East Linda.

6.3.3 High School

Lindhurst High School, located at the north end of Olivehurst, had a September enrollment of 1,132, well below its 1,500-student capacity. A 36-acre high school site, to be located at the southwest corner of Hammonton Smartville and Dantoni Roads, will have a capacity of 1,500 students, and will serve the 1,246 projected high school student needs of East Linda. Lindhurst High School will serve Olivehurst and the southern portions of West Linda.

6.4 Recreation and Parks

There are presently two parks located in Linda, one in West Linda and another in East Linda, located east of Grove Avenue just west of the Country Club Park tract. East Linda Park is owned by the County, and maintained by the Linda County Water District. The park is improved with turf playing fields and children's play equipment, but contains few trees or other amenities.

The Specific Plan provides five parks, including one community-wide park and four neighborhood parks, as illustrated in Figure 6-2, the Parks and Public Facilities Plan. These park facilities provide 75.2 acres of parkland at the equivalent of 4.8 acres per 1,000 residents, and are supplemented by the recreation facilities at the school sites and along the floodway/bikeway easements.

6.4.1 Community Park

A community-wide park is intended to provide for very active recreation that requires extensive land area and generates high levels of noise, traffic and lighting in the evening hours. A 40-acre community park is proposed for the south side of Hammonton Smartville Road, astride the Linda Creek drainage, and will contain detention basins to accommodate heavy runoff during winter storms. This park will serve not only Plan area residents, but also other residents in East Linda. In addition, the park will contain a public library.

6.4.2 Neighborhood Parks

Neighborhood parks are intended primarily for use by residents of the immediate neighborhoods and include passive and active recreational facilities not conducive to large organized sporting events and the associated

Figure 6-2
Parks and Public Facilities Plan

noise and vehicle traffic. Neighborhood parks will include turfed lawn areas suitable for picnics and casual activities, in addition to children's play equipment.

Four neighborhood park sites are designated in the Plan area: a 9.1-acre park located at the northeast corner of Oakwood Drive and Street "A", adjacent to the elementary school located south of the Country Club Park tract; a 9.4-acre park located at the southwest end of the Plan area between Rupert Avenue and the Southern Pacific Railroad; an 8.7-acre park just east of the Highway 70 bypass, north of the existing Linda Avenue right-of-way; and an 8-acre park located on the west side of the new Street "C", south of and adjacent to the proposed elementary school site.

A portion of the 9.4-acre park adjacent to the elementary school site may potentially be set aside for a seasonal wetland preserve, as noted in Section 5.3.

6.5 Public Libraries

There are presently no public library facilities in East Linda, although there is a library at Yuba College. The Yuba County Library is located in Marysville. A site has been designated for a County branch library within the community park on Hammonton Smartville Road as illustrated in Figure 6-2, Parks and Public Facilities Plan.

The State Office of Library Development Services indicates that the size of a local public library should be a minimum of 0.55 square feet per capita, and that a new library should be built to accommodate a community's estimated population for at least 20 years. It is intended that the new library facility would serve the entire community of Linda. Given the projected total Linda population of approximately 27,000 at buildout of the Specific Plan (existing Linda population plus the 15,000 additional persons expected to reside in the Plan area), the estimated library size should be at least 14,850 square feet.

According to the Office of Library Development Services, the average cost for construction of a new library facility, including all construction, interior design and shelving, is $130 per square foot. Thus, the estimated total construction cost for the library would be $1,930,000. In this case, the Plan area should be responsible for its relative share of the cost, based on the population at buildout. Assuming that the Plan area will have approximately 58 percent of the the total Linda population, the Plan area's share of the library funding should be approximately $1,119,700.

6.6 Solid Waste Disposal

Solid waste is disposal for East Linda is provided by Yuba-Sutter Disposal, Inc., which also serves the other urban areas of Yuba and Sutter Counties. Their landfill site is located at the northeast end of Marysville, on Highway 20, and is approximately 95 acres in size. The landfill has an estimated life expectancy of approximately eight years.

6.7 Water Supply

Water is supplied to the community of Linda by the Linda County Water District, and derived from groundwater sources through a series of seven wells. The water is lightly chlorinated at the well sites, and delivered to residential and commercial users via six to eight-inch diameter main lines all interconnected through a looped water line system. The District system has no storage tank facilities, but by utilizing well systems dispersed throughout their system, the District is able to avoid large cross-town transmission lines and their attendant maintenance and operation costs. There are two 12-inch main lines, and one 18-inch line located in Dantoni Road north of North Beale Road. Locations of water lines and well systems in and near the Specific Plan area are shown in Figure 6-3, the Water Distribution Plan.

The District currently serves about 12,000 people, delivering an average of two million gallons per day (mgd). The present water system has the capability of providing 8,420 gallons per minute (gpm) which is adequate to meet current domestic peak hour demands. However, the system needs additional standby power in order to meet system demands and design criteria in case of a power outage.

The District has a Water System Master Plan, completed in January 1988, which was developed as a planning tool to be used for the period through the year 2010. The Plan includes proposed service areas, domestic water and fire flow projections, and recommendations for treatment needs and pipeline improvements which would allow the District to meet public health and flow requirements. The system improvements were based on a projected population growth of approximately one percent per year; by the year 2010 the Plan area was projected to have only about 2,750 people, far less than the 15,580 people expected to reside in this Specific Plan. These improvements were estimated to cost approximately $2,600,000, and would have provided a system capable of serving the demands of up to 16,400 people at 2.95 mgd. This would be inadequate to serve the anticipated Specific Plan area population, consequently, additional improvements will be necessary.

The area has abundant groundwater supplies; in fact, groundwater levels are higher now than they were 20 years ago. The District will continue to derive its water supply solely from groundwater sources, and will expand their

Figure 6-3
Water Distribution Plan

supplies as needed by acquiring new well sites through purchase, eminent domain or other means. The District has concentrated its recent efforts toward improving water quality, letting other expansion projects wait until later.

The master plan prepared for the District in 1988 estimated that a central water treatment plant would cost approximately $7 million. District officials believe, however, that it is more cost-effective to operate individual wells than a treatment facility, so long as the quality of the well water remains high. Although most of the homes in Linda receive their water from the District, a number of residents have their own wells, especially along Griffith Avenue at the eastern end of the Specific Plan area. The Castlewood Mobile Home Park and Lago Road subdivision, for example, have their own wells, as does Yuba College, although Yuba College is considering the feasibility of disconnecting its domestic water system from its existing well supply and receiving District water for all domestic and limited irrigation demands.

The Linda County Water District will serve the East Linda Specific Plan area. New residential developments shall connect to the water and sewer systems if they are located within 200 feet of an existing system, and must also be annexed to the District. Developers would be required to pay an annexation fee, currently $510 per gross acre of property being annexed plus the costs incurred to prepare maps and process the annexation. At the time a project is constructed, the developer would build the water distribution lines to District specifications, then turn the facilities over to the District.

The total cost estimate for construction of the expanded water delivery system infrastructure required to serve the development and increase in population resulting from this Specific Plan is approximately $9,956,000. This would include the construction of seven new wells, several miles of new water mains, and other appurtenant facilities. Approximately 1,500 acres (85.2%) of the Specific Plan area is currently outside the District boundary. At the present annexation fee of $510 per acre, a total of $765,000 could be generated if all 1,500 acres were ultimately annexed to the District. Given the existence of a number of scattered developments, however, it is unlikely that all of the Plan area will be annexed to the District.

Because the proposed water system will consist of well supplies, phasing of improvements can be done relatively easily. Phasing also does not need to proceed from one area to another provided at least two wells and one standby generator are connected to the phased system.

6.8 Wastewater Collection and Treatment

Wastewater treatment in Linda is also provided by the Linda County Water District. Most of the Specific Plan area is within the District's Master Plan boundaries, although only a portion is currently provided with sewer service.

Built in 1960, the sewer system is very well designed. The District's existing treatment plant has a design capacity of 1.5 mgd, average dry weather flow, adequate to serve the needs of about 12,000 people. The system can handle a peak wet weather flow of 4.0 mgd and currently processes about 1.0 mgd.

The Linda County Water District wastewater treatment facility utilizes a secondary (biofiltration) system, with evaporation and percolation-type settling ponds. The plant is located approximately 15,000 feet west of the Plan area, just east of the Feather River levee. The plant's discharge and holding ponds are located on the west side of the levee within the Feather River flood plain. The District has permission to discharge treated water into the Feather River from November to May, but has not needed to for at least the past 10 years due to the adequate capacity of its evaporation ponds.

The District's wastewater trunk line and collection system consists of 6-inch through 27-inch diameter gravity sewer lines and seven sewage lift pump stations. The lift stations are necessary to prevent deep sewer line excavations and to transport wastewater across the relatively large area and level terrain. The present sewer trunk line extends from the treatment plant up to Erle Road, and proceeds through the Country Club Park tract to North Beale Road, where it extends east to a point approximately one half mile east of Griffith Road. The lines, however, will not be sufficient to carry significant increases in wastewater resulting from Plan area buildout, and would therefore have to be upgraded. Either the existing 24 to 27 inch trunk line would either have to be enlarged, or a new 24-inch line constructed by 1995, assuming residential development commences by late 1990.

The District's Wastewater Treatment Master Plan Report, completed in April 1986, was intended to guide wastewater facilities planning for the period from 1987 through the year 2005. The Plan indicated that the treatment plant could be improved and expanded to serve a population of approximately 16,000 persons, with a design capacity of 1.6 mgd dry weather flow, and a 5.8 mgd wet weather flow, at a cost of approximately $1,700,000 (1988 dollars).

This incremental expansion of the treatment plant can be done fairly easily during the initial phases of development within the East Linda Specific Plan area. With the population growth anticipated to occur as a result of the Specific Plan, however, a greatly expanded or second wastewater treatment plant will be required to adequately serve the area. To provide additional capacity over the above amounts will require a significant amount of new facilities and a new discharge permit from the State Department of Water Quality Control.

Figure 6-4
Wastewater Collection System

Figure 6-4 shows the existing and proposed wastewater system. In the development of the East Linda Specific Plan sewer system, a larger trunk line should be provided to intercept the flow from the existing trunk line in Erle Road and at North Beale Road at Dantoni Road. This will reduce flows in the current system trunk lines from the treatment plant to North Beale Road at Dantoni, and delay or eliminate the need for their future expansion. It is anticipated that sewer lines serving future development in the northeast portion of the Plan area north of North Beale Road would tie into pump station #3 on North Beale Road, while lines serving development in the south half of the Plan area would tie into the pump station on Erle Road.

Construction of the backbone sewer system needed to serve the Specific Plan area (including relieving of the existing trunk line in Erle Road), as well as the 1.56 mgd treatment plant expansion (over and above the short-term 0.6 mgd plant expansion to serve all of the District), is estimated to cost $15,160,000. The estimated cost of expanding the treatment plant alone is $6,000,000 (if done all at one time).

Phasing of the sewer system improvements will be difficult because of the major cost of the trunk line and the need for a pumping lift station to carry wastewater from the Plan area to the treatment plant. It would be possible to expand the plant in two or three phases, although this would result in a higher total cost. Expanding the treatment plant in three phases is estimated to cost $10,150,000, over $4 million more than if the plant expansion were constructed at one time. Also, development within the Specific Plan area would need to be phased to occur in the southwest portion first, and the northwest last, in order to extend the new trunk without leapfrogging. Project phasing is described in Section 7, Implementation Element.

As with the water system, a number of households in East Linda are not served by the District, but rather by their own individual septic tank/leach field systems. While no serious problems have occurred, the placement of a significant number of additional septic systems may result in contamination of groundwater supplies. It is therefore necessary that all new development at densities greater than one dwelling unit per acre connect to the District sewer system. The annexation fees for the wastewater treatment services are currently the same as for water, $510 per gross acre of land.

6.9 Storm Drainage

Storm drainage is a major concern in the East Linda Specific Plan area. The topography of Yuba County is such that drainage flows naturally from the Sierra foothills down to the Feather River via the Yuba and Bear Rivers and numerous smaller creeks, including Linda Creek and Drain. Unfortunately, much of the runoff drains into Linda and Olivehurst, resulting in periodic shallow flooding. Part of the drainage problem is due to the inadequate

capacity of downstream drainage channels. During heavy runoff, channels south of Olivehurst frequently back up with water, thereby restricting the downstream flow of water out of Linda.

The Specific Plan area is served by the Linda and Olivehurst Drains. These Drains, which are an integral part of the South Yuba Drainage Plan, join to the south of the Plan area to form the Olivehurst Interceptor which then connects to Reeds Creek Channel. Connection of this interceptor to Reeds Creek Channel was to be completed by Yuba County Public Works during the summer of 1989. Other than some minor ditches and driveway drains, there are no other major developed drainage canals or pipes in the Plan area.

Due to the limited capacity of downstream drainage facilities, it is crucial that the design capacity of the Linda and Olivehurst Drains not be exceeded. All development within the East Linda Specific Plan area must conform to the design criteria of the South Yuba Drainage Plan, and stay within the Drain constraints imposed in order not to adversely affect other areas downstream. The Drainage Plan provides design criteria to be utilized in development of runoff quantities and sizing of pipes and channels. In addition, there are key locations along the two Drains at which maximum specified flows shall not be exceeded. Thus, any smaller areas that develop in the Specific Plan area must also have their drainage systems designed so as not to exceed their share of this maximum flow.

The future drainage system demands can be predicted by applying the South Yuba Drainage Plan runoff design coefficients to the proposed Specific Plan at buildout. The resulting figures indicate that runoff will be increased by approximately 400% over 1981 conditions, which are essentially the same as today, as there has been relatively little development within the Plan area since that time.

The incremental increases in stormwater runoff resulting from development of the Specific Plan will have to be retained or detained within the Plan area. This will be accomplished through the construction of a series of stormwater detention and retention ponds along Linda Creek and the Linda and Olivehurst Drains. These ponds or basins will be created at specific locations within the community park, and along the 100-foot-wide P G and E power line easement and along a portion of Erle Road, and will be incorporated into a floodway/recreation easement. It is intended that the periodic ponding of water will enhance the park and neighborhoods where the ponds will be located. In addition, the open drainage channels will be improved so that they will appear as natural stream courses to the maximum extent possible. The drainage system and floodway within the Linda area is shown in Figure 6-5.

Figure 6-5
Drainage System and Floodway

The Yuba County Public Works Department intends to make improvements to the Linda Drain upstream from Linda, including cleaning out and re-grading the ditches and installing larger pipes, during the next year or so. With the exception of small individual tracts, most drainage will be accommodated through open channels; a pipe system is not economically feasible for this area.

The cost of improvements to the Linda and Olivehurst Drains to bring them to the size necessary to accommodate future runoff flows generated within the Plan area is estimated to be $630,000, as shown in Table 6-2. This figure does not include the costs of constructing separate detention or retention basins, most of which will be located within parks. It is anticipated that those costs will be funded along with the park improvements.

TABLE 6-2

Drainage System Improvements At Full Buildout

Major Drain	Length (Feet)	Improvement Cost	S.P. Area (Acres)	$/acre
Linda Drain	23,000	$345,000	1,040	$332
Olivehurst Drain	19,000	285,000	720	396
TOTAL	41,000	$630,000	1,760	

6.10 Utilities

6.10.1 Electricity and Natural Gas

Electric and natural gas service is provided to the community of Linda by the Pacific Gas and Electric Company (PG and E). A PG and E power line runs north-south through the East Linda Specific Plan area, along the west side of Yuba College. Although PG and E's long range plans provide for availability of gas and electric service to accommodate increased demand, delivery of service to any particular development will need to be reviewed by PG and E as each development is proposed. The growth envisioned in the Specific Plan area will place significant demands on existing transmission and distribution systems. Any new development will have a cumulative impact on PG and E's systems and rights-of-way outside the development's boundaries.

6.10.2 Telephone

Telephone service is currently provided to all of Yuba County by Pacific Bell. Telephone main feeder lines and associated conduit are located along North

Beale Road and Hammonton Smartville Roads as well as Griffith Avenue. Distribution lines to individual tracts will be installed as development takes place. The builder will dig trenches and provide one-inch PVC conduit from each unit to the service box at the property line as required.

All new electrical and communication lines will be installed underground. Appurtenant facilities such as transformers may be installed at grade level.

6.11 Public Facilities and Services Policies

1. Institutional uses other than neighborhood schools and parks shall be located on collector streets or major arterials so that associated vehicle traffic does not disrupt residential areas.

2. Schools, parks, and libraries shall be linked to the pedestrian path system.

3. Wherever possible, public open space and parks shall be located adjacent to school sites. The Marysville Joint Unified School District is encouraged to enter into joint use agreements whenever possible so that public use of facilities can be maximized.

4. Parks shall be landscaped with native trees and shrubs to the maximum extent possible.

5. Parks shall be designed to facilitate surveillance by adjoining residents, security services and police.

6. The park areas and recreation floodways identified in this Plan shall be dedicated to the County.

7. Substantial setbacks and landscape buffering shall be provided within school sites abutting other land uses unless those adjoining uses provide such buffers. The setbacks and detailed landscaping shall be determined at the time of project approval by the Planning Commission.

8. All public facilities shall be constructed consistent with the policies in the Open Space Element, Section 5.

9. Urban runoff should be directed to the pre-existing watershed, as well as designated detention or retention basins.

10. All new electrical, telephone and cable services shall be placed underground. Existing lines and cables should also be undergrounded where appropriate and financially feasible.

11. Public utilities, such as transformers, terminal boxes, meters, fire risers, backflow preventers and other similar facilities, shall be screened and oriented away from public view except as required by the County or public utility companies.

12. All public facilities shall be designed and landscaped compatible with adjacent non-public uses.

13. All institutional uses shall be of a design and scale compatible with neighboring residential uses and shall incorporate landscaping, setbacks and siting standards similar to those required in adjacent land uses.

7. IMPLEMENTATION ELEMENT

The Implementation Element addresses the enforcement of standards and the funding and phasing of capital improvements.

7.1 Land Use Regulation

7.1.1 Zoning

All land within the East Linda Specific Plan area shall be zoned in accordance with a newly-created "Specific Plan Development" zoning district. The Specific Plan Development zoning allows greater flexibility in the design of residential and commercial developments than would otherwise be possible through application of conventional zoning regulations. In residential zones, for example, planned unit developments encourage the design of projects which offer a variety of housing types and incorporate such features as clustered buildings, richly landscaped common open space, common recreation facilities and other amenities.

7.1.2 Development Agreements

The property owners subject to the provisions of this Specific Plan will execute a development agreement. Such agreement will set forth the infrastructure improvements, public dedication requirements, landscaping amenities and other contributions to be made by a property owner in return for guarantees by the County that certain land uses and densities in effect at the time of agreement execution will be allowed.

7.1.3 Easements

Much of the open space in the Plan area, including floodways, public parks and portions of the power line easement set aside for bikeway corridors will be dedicated to the County. The bikeways and pedestrian pathways adjacent to single-family residential uses will be located within a street right-of-way or other public ownership. In those few instances where the open space areas will be privately owned, such as portions of the power line corridor, dedication of public access easements will be required to assure right of access by the general public for bikeways and pedestrian pathways.

Where the landscape corridor abutting single-family residential use extends beyond the public right-of-way, that portion of the landscape easement shall be dedicated to the County for landscaping purposes. Easements for public utilities access and maintenance will be dedicated to the County.

7.1.4 Covenants, Conditions and Restrictions (C.C. & R.s)

Covenants, Conditions and Restrictions shall be applied to multi-family residential and non-residential private properties that front on the arterial and collector streets that are designated for a landscaped corridor in Section 8, the Urban Design Guidelines. In those instances the C.C. & R.s shall provide that the property owner is responsible for installation and maintenance of the landscape corridor to the back of curb.

7.2 Maintenance of Common Facilities

Private common areas in commercial and multi-family developments and other open space areas will be maintained by the property owner. Landscape setback areas along arterial streets will be maintained by the property owner in multi-family residential and all non-residential properties. Landscaping within public right-of-ways, including roadway corridors and floodways, as well as bikeways, shall be maintained by the Linda County Water District or other Yuba County entity using funding generated by a Landscape and Lighting Maintenance District created for this purpose.

7.3 Land Dedication

Land will be dedicated to the County for the following purposes:

- Street Right-of-Way
- 100-year Floodway
- Bikeway Corridors
- Utility Easements
- Landscape Easements

School sites will be acquired at fair market value by the Marysville Joint Unified School District through provisions of California statutes. If not acquired by the District, the school designation will be replaced by the underlying zoning (typically residential).

Yuba County presently does not have a Quimby Act ordinance requiring the dedication of land or payment of in-lieu fees by developers for the provision of public parks. It is recommended that the County enact such an ordinance prior to the approval of any further development project applications within the Specific Plan area to ensure that adequate funding will be provided for parkland acquisition and development.

7.4 Public Facility Financing

Public facilities will be financed through a variety of mechanisms including community facilities (Mello-Roos) districts, special assessment districts, and developer fees, as described below.

7.4.1 Community Facilities (Mello-Roos) Districts

The Mello-Roos Community Facilities Act of 1982 enables cities, counties, special districts, and school districts to establish community facilities districts (CFDs) to finance a wide range of public facilities including, but not limited to, water and sewer systems, storm drains, park and recreation facilities, schools, police and fire stations, street improvements, and libraries. The funds are generated through the imposition of a special tax which must be approved by a two-thirds majority vote within the defined boundaries of the CFD. If this area includes less than 12 registered voters, the property owners' votes are counted and apportioned according to acreage. The Act allows for a majority protest by voters or landowners, in which case proceedings for the formation of the CFD are terminated, but because the CFD boundaries may be discontinuous, properties belonging to those who oppose the tax can be deleted.

Upon formation of the CFD and levy of the special tax, a special tax lien is recorded against all eligible properties within the District. This special tax may not be based on real property value, and there is no requirement that the tax be apportioned on the basis of property benefit as with special assessments, although it can be done at local option (Government Code section 53325.3). Most Mello-Roos special taxes have been structured on the basis of density of development, square footage of construction, or amount of acreage being developed. The tax may be collected in the same manner as ad valorem property taxes, and is generally included in the regular county property tax bill. The ultimate burden of the special tax would be borne by either the developer, the original land owner, or the final owner, depending upon the ownership of the land at any particular time.

The procedure for establishing a Mello-Roos CFD is not simple and, furthermore, requires annual governmental action to maintain it. Therefore, CFDs are typically most appropriate when there is concern about the costs of ongoing operations, rather than initial one-time capital costs. On the plus side, however, special tax bonds secured by the proceeds of the CFD can be issued to provide an immediate source of funding for capital improvement costs which do not qualify under other readily accessible financing tools. Such often difficult to finance costs include roads and community facilities such as libraries, parks, police and fire stations. Through the issuance of special tax bonds, the debt can be repaid over time.

Within the East Linda Specific Plan, it is recommended that the sewer, water, drainage and street improvements, as well as the library, be funded through a Mello-Roos CFD.

7.4.2 Special Assessments

Another financing mechanism available to local governments is the special assessment, authorized by a number of Assessment Acts, including the Improvement Act of 1911, Municipal Improvement Act of 1913, Improvement Bond Act of 1915 and Landscaping and Lighting Act of 1972, to name but a few. Depending upon the particular assessment act, special assessments can be levied to finance a number of public facilities, including street paving, sidewalks, street lighting, parks, sewer systems, drainage systems, flood protection, water supply systems, fire protection and other improvements, where a direct and specific benefit can be established between the improvement and specified parcels of real property. Unlike taxes, the sum of a special assessment cannot exceed the cost of providing the specific improvement or service, and special assessments can only be levied against those properties which benefit from the improvement being financed.

Special assessments were widely used in California as a major financing tool in the 1910s and 1920s, but economic conditions during the Great Depression caused numerous landowner defaults on assessments which, in turn, made it difficult for local governments to pay off the bonds backed by the assessments. From that time until the passage of Proposition 13 in 1978, special assessments were used sparingly as local governments came to rely largely upon property taxes for their revenue. After Proposition 13 initially caused local property tax revenues to fall by over 50 percent, special assessments quickly regained popularity.

The current popularity of special assessments in California is due to a number of factors. First, the courts have held that special assessments are not ad valorem taxes, and thus are exempt from the taxation limits imposed by Proposition 13. Second, the proceeds of a special assessment are not subject to Gann spending limitations because they are not taxes. Third, they are generally not subject to a public vote, but are instead established by the city council or county board of supervisors after a public hearing on the proposed assessment district has been held in order to give landowners the opportunity to protest the district formation. The formation of the district is generally done at the request of property owners who will benefit from the improvements.

Within the East Linda Specific Plan area, the acquisition of parkland and park improvements, including the installation of landscaping, irrigation and lighting, will be financed through a Landscape and Lighting District formed within the Plan area for this purpose. The District will also fund the

maintenance of parks and the landscaped corridors along the arterial streets adjacent to the single-family subdivisions within the boundaries of the District. Bonds may be issued in accordance with the Improvement Bond Act of 1915.

The Landscape and Lighting Assessment District would be established by the Board of Supervisors after conducting a public hearing to receive protests, although a majority protest may be overridden by a four-fifths vote of the Board. The assessment must be evaluated annually by the Board at a noticed public hearing to ensure that it is sufficient to cover project costs.

7.4.3 Integrated Financing Districts

The East Linda Specific Plan area is comprised of parcels widely varying in size, ranging from 6,000 square feet to 232 acres. Although nearly half of the Plan area consists of relatively small, fragmented parcels of ten acres or less, there are eight landowners who control more than 30 acres, two of whom own more than 200 acres. Most of the larger parcels are located in the portions of the Plan area that are north, east and south of Yuba College, and it is anticipated that they will be developed under Phase 1 (see Figure 7-1, Phasing Plan). Some of the owners of these larger parcels are interested in developing their properties fairly quickly, but others may wish to wait a number of years before they develop. In the event that a disagreement should develop over the timing and financing of public improvements, an integrated financing district could be established.

The Integrated Financing District Act, enacted in January 1987, creates an alternative method for collecting assessments levied under the various assessment acts noted in Section 7.4.2. Integrated financing districts provide a means of financing the construction of major public improvements without imposing a financial burden on property owners within the district who are not yet ready to develop or, conversely, on those developing their projects in the first phases who must construct many of the infrastructure improvements. In many instances, developers are resistant to the formation of a Mello-Roos District when they must construct significant infrastructure improvements required for their own particular project which will also benefit other landowners intending to develop their property later. These developers may be unwilling to finance the improvements unless other developer/landowners pay their fair share of the improvement costs.

Integrated financing districts have two features which distinguish them from other assessment districts:

1. They can levy an assessment, in the form of a lien against a specific property, which is contingent upon future land development and payable upon approval of a subdivision map or receipt of building permits.

2. They allow the local agency to enter into an agreement with a private investor whereby the investor will be reimbursed for funds advanced to the agency for the project being financed.

Because the assessment is not triggered until development begins, these features make integrated financing districts an attractive option when development is to occur in phases. Payment of assessments by landowners are deferred until such time as public improvements are needed.

The procedure for creating an integrated financing district, including entering into a reimbursement agreement, is in addition to the procedure required by the applicable assessment act. The resolution of intention by the Board must include a description of the rates and method of apportionment, the contingencies which will trigger assessment of the levy, the fixed dollar amount per unit of development for the contingent levy, and a description of any proposed reimbursement agreement. No election is required, however, proceedings are terminated if written protests are received from owners of half the land area within the proposed district. Proceedings may not be initiated again for a year unless overridden by a four-fifths vote of the Board.

7.4.4 Development Fees

In addition to the land dedications, Mello-Roos Community Facilities District, and assessment districts described above, the public facilities infrastructure improvements will be funded through various development fees paid by developers at the time of issuance of building permits. There are essentially two kinds of development fees: 1) connection fees for installing new utility service such as water and sewer hookups; and 2) impact fees to cover the cost or "impact" of the new development on the infrastructure system. Impact fees generally include traffic mitigation fees, school fees, and sewer and water system improvement fees. Other possible funding sources may include the Linda County Water District annexation fees and other minor miscellaneous fees.

7.5 Recommended Financing Alternatives

The total estimated cost for all capital improvements is $39,823,700. A breakdown of these costs per residential dwelling unit and commercial acre is shown in Table 7-1 below. As can be seen, the average total cost per residential unit is $5,568, and per commercial acre is $57,051.

TABLE 7-1

Preliminary Capital Improvement Cost Estimates

Capital Improvement	Residential		Commercial	
	Total Cost	Cost/Unit	Total Cost	Cost/Acre
Sewer	$12,798,720	$2,128	$2,361,280	$21,235
Water	8,742,150	1,454	1,214,350	10,920
Storm Drains	535,500	90	94,500	850
Streets	3,212,810	534	2,196,190	19,750
Parks/Landscape	6,536,696	1,087	411,804	3,703
Library	1,064,334	177	55,366	498
Fire	589,440	98	10,560	95
TOTAL	$33,479,650	$5,568	$6,344,050	$57,051

The following brief discussion outlines the recommended financing mechanisms for each of the capital improvements required in the East Linda Specific Plan area to accommodate future growth. In this financing plan, only the apportionment of capital improvement costs are calculated. Operating expenses are assumed to be paid by increases in local property taxes, user fees, and other County revenues generated by the estimated growth in the County's population.

1. Sewers
   The total estimated cost to construct the required new sewer facilities is $15,160,000. These costs include $4,930,000 for the sewer lines, $80,000 for the two pumping stations, and $10,150,000 for the treatment plant expansion, (engineering, administration and contingency costs have been included in these figures. The construction of new extensions of the primary sewer lines, the pump stations, and the treatment plant expansion will be financed by the Mello-Roos Community Facilities District. Sewer line connections to individual projects will be funded through developer-paid sewer system improvement and connection fees.

2. Water
   The total estimated cost for construction of the expanded water delivery system, including the drilling of six new wells with treatment provided at the well site ($4,900,000), and several miles of water lines and other appurtenant facilities ($1,990,100), is approximately $9,956,625. The total figure also includes $3,066,525 for engineering, administration and contingency expenses. The construction of these improvements will be financed by the Mello-Roos CFD. Water line

connections to individual projects will be funded through developer-paid water system improvement and connection fees.

3. Storm Drains
   The cost of improvements to the Linda and Olivehurst Drains necessary to accommodate development within the Plan area is estimated to be $630,000. These costs, plus the as yet undetermined costs of constructing retention basins which serve the larger community (some of which will be placed in the parks), will be financed through the Mello-Roos CFD. Any costs of detention or retention facilities for individual projects will be funded through developer-paid drainage improvement fees.

4. Streets
   The total projected cost of necessary street improvements is $5,409,000. Street improvements include, but are not limited to, paving, curbs, gutters, sidewalks, and street lighting. There are essentially three tiers of streets in terms of who benefits from their improvements: 1) "In-tract" streets, those local roadways serving a specific neighborhood and used primarily by people residing in those neighborhoods; 2) "Shared locally" streets, those collector or arterial roadways serving a larger area, but used primarily by those residing or working in the local community; and 3) "Shared regionally" streets, those arterials which form the larger circulation network for an area, and which benefit many throughout a region.

   The in-tract streets will be financed by the developers of individual projects which are served by those streets, and have not been included in the $5,409,000 cost estimate above. The streets which are shared locally or regionally, however, will be funded partially through the Community Facilities District, and partially through traffic or other road fees paid to the County at the time of permit approval.

5. Parks
   The estimated cost to develop a park (excluding land acquisition costs) is $70,000 per acre based on landscape architectural data. A total of 75.2 acres of parks are proposed, thus the improvements costs are estimated to be $5,264,000. The land acquisition costs are more difficult to predict, since land costs can vary widely over time, but a reasonable estimate would be approximately $2.3 million.

   Funds will be raised for the acquisition of parkland through the dedication of land or payment of in-lieu fees, and creation of a Landscape and Lighting District. The installation of turf, landscaping, irrigation and lighting in the parks, as well as their maintenance, will also be funded by this mechanism. In addition, the district will fund

the improvements and maintenance of the landscaped corridors along the arterial streets adjacent to single-family subdivisions.

6. Library
   The library facility is recommended to be at least 14,850 square feet in size, per the Office of Library Development Services standards. The average cost for construction of a new library facility, including all construction, interior design and shelving, is $130 per square foot. Thus, the estimated total construction cost for the library would be $1,930,500.

   The library should be funded through a Mello-Roos Community Facilities District, which should encompass the entire Linda community. In this case, the Plan area properties should be responsible for their relative share of the burden, based on the population at buildout. Assuming that the Plan area will have approximately 58 percent of the total Linda population, the Plan area's share of the library funding should be approximately $1,119,700.

7. Fire
   Although no fire station is proposed to be included in this Specific Plan, cost estimates are provided for reference in the event a station is necessary in the future. A typical 6,000 square foot station, at approximately $100 per square foot, would cost $600,000 to construct. Additional fire-fighting equipment will be required, however, to serve population growth within the Plan area. The estimated cost for a standard fire truck, fully equipped, is approximately $120,000, while a fully equipped ladder truck can run as high as $250,000. It is anticipated that four trucks will be required, at a total cost of $600,000.

8. Police
   Again, no new sheriff substation is proposed for the Plan area, but additional personnel and equipment such as vehicles will be necessary. These costs will be funded through local property taxes.

7.6 Phasing

It is likely that the first portions of the East Linda Specific Plan to develop on a large scale will be the 370 acres located north of Erle Road and south of the developed area of East Linda, and the 160 acres north of Yuba College, a portion of which is currently being developed. The reason for development occurring in these areas first is that there is already strong developer interest, and they consist of large tracts of land under a single ownership.

It is intended that all basic infrastructure required to support the land uses set forth in the East Linda Specific Plan be constructed under a generalized three

phase development program. The funding of such infrastructure will be provided by Community Facilities Districts, development fees, and through developer reimbursement agreements. The three phases of development are illustrated in Figure 7-1, Phasing Plan.

Phasing of the water delivery system infrastructure can be done relatively easily, since the entire system will consist of well supplies, without a central treatment facility. Likewise, phasing of the street improvements can be easily accomplished since they can be constructed incrementally as adjacent residential or commercial development occurs, and also because much of the circulation system is already in place, although most existing roadways will need upgrading to some extent. The proposed Route 70 Bypass is not included in the phasing plan, since its funding and construction date has not yet been determined.

Phasing of sewer infrastructure improvements, however, will be more difficult because of the significant costs involved with construction of the major trunk line extensions, pumping lift station, and treatment facility. It will add approximately $1 million to the cost of constructing the sewer improvements in phases. Given the anticipated pattern and timing of development within the Plan area, however, it is more realistic to complete the sewer system in phases, with the first phase occurring at the southeast corner of the Plan area along Erle Road. A summary of capital improvement costs broken down for each phase is shown in Table 7-2.

Schools will also be phased, with their development occurring as need arises. As noted in Section 6.3, there is currently a need for a new elementary school in East Linda, and construction of the school on Oakwood Drive should proceed as soon as financially feasible. Thus, this school would be constructed in Phase 1. Since there is additional capacity available at present in both Lindhurst High School and Alicia Intermediate School, the new high school and intermediate school, as well as the other elementary schools, will be constructed later.

Figure 7-1
Phasing Plan

TABLE 7-2

Summary of Required Capital Improvement
Costs by Phase

Detailed Capital Improvements	Phase 1	Phase 2	Phase 3	Total Costs
Sewer				
1. Treatment plant expansion	$7,250,000	$2,900,000		$10,150,000
2. Sewer Trunk lines	3,910,000	860,000	160,000	4,930,000
3. Pumping stations	40,000		40,000	80,000
Total *	**$11,200,000**	**$3,760,000**	**$200,000**	**$15,160,000**
Water				
1. 8" Pipeline	$ 35,000	$ 75,000		$ 110,000
2. 10" Pipeline	48,000			48,000
3. 12" Pipeline	518,700	342,000	228,000	1,088,700
4. 14" Pipeline	525,000			525,000
5. Wells w/treatment	2,800,000	700,000	1,400,000	4,900,000
6. Pressure Valves & Misc.	142,400	53,600	22,400	218,400
7. Admin. & Engineer (20%)	813,800	234,100	178,700	1,226,600
8. Contingencies (25%)	1,220,700	351,200	268,000	1,839,900
Total	**$6,103,600**	**$1,755,800**	**$2,097,100**	**$9,956,500**
Storm Drains				
1. Linda Drain	$165,000	$ 90,000	$ 90,000	$345,000
2. Olivehurst Drain		210,000	75,000	285,000
Total	**$165,000**	**$300,000**	**$165,000**	**$630,000**
Streets				
1. Erle Road	$ 804,000	$ 280,000		$1,084,000
2. North Beale Road	175,000	175,000	50,000	400,000
3. Dantoni Road	700,000	175,000	70,000	945,000
4. Streets "A" & "B"	750,000			750,000
5. Rupert Avenue	200,000		100,000	300,000
6. Hammonton Smartville		320,000	240,000	560,000
7. Griffith Avenue		260,000	260,000	520,000
8. Street "C"			250,000	250,000
9. Five Traffic Signals	480,000	120,000		600,000
Total	**$3,109,000**	**$1,330,000**	**$970,000**	**$5,409,000**
Parks				
1. Park Improvements	$1,295,000	$3,409,000	560,000	$5,264,000
2. Landscape Corridors	850,000	528,500	306,000	1,684,500
Total	**$2,145,000**	**$3,937,500**	**$866,000**	**$6,948,500**
Library		$1,119,700		**$1,119,700**
Fire Trucks	$360,000	$120,000	$120,000	**$600,000**
TOTAL	**$23,082,600**	**$12,323,000**	**$4,418,100**	**$39,823,700**

* These figures include engineering, administrative and contingency costs.

8. URBAN DESIGN ELEMENT

Urban design is the fabric that binds together all the physical elements of the built community, both the man-made environment and the natural environment. These elements include:

- architecture (building form and style)
- landscaping
- screening/fencing
- lighting
- signage
- street furniture

The Urban Design Element contains guidelines which provide a level of consistency throughout the Specific Plan area for design elements that are common aspects of many of the proposed land uses. The consistency in urban design is intended to serve many specific purposes including the promotion of high quality development, an aesthetically pleasing community environment, and convenient vehicular/non-vehicular access, but the fundamental purpose is to create a sense of identity and "place" for East Linda.

This section of the Specific Plan is organized around the elements of urban design rather than specific uses. Each subsection begins with general guidelines and objectives. Applications of the design guidelines on specific land uses are described as subheadings to the design element. This approach to organizing this section reflects the primary emphasis on the common themes in the design guidelines rather than land use types. The emphasis in urban design is toward individual design features that are common throughout the Plan area.

The design guidelines presented in this section overlap with the guidelines presented in the Land Use Element, Section 2. The land use and the urban design guidelines have certain similarities; however, the emphasis in the land use section is oriented to the relationship of land uses to one another, and to the design of land use as a distinct pattern, as in the single family neighborhoods. There is also overlap with the design guidelines relating to the use of open space presented in the Open Space and Conservation Element, Section 5. The design of the circulation features, including street patterns and the bikeways and pedestrian paths are addressed in the Circulation Element, Section 4.

In the East Linda Specific Plan area there is no unique natural feature or historic setting that would dictate a particular theme or selection of materials and architectural style. However, there is a desire to establish a more positive

identity for East Linda. Design emphasis in the Plan is given to the enhancement of the character of the existing areas of development, as well as the future development areas.

The design guidelines are intended to serve as an evaluative aid to the Yuba County Planning Commission and Board of Supervisors in the review of individual development projects within the Plan area. These guidelines were created to express "intent" rather than "absolutes", thereby allowing flexibility in reaching design solutions. Used in conjunction with other Specific Plan policies, these guidelines will promote creativity and innovation as well as consistent quality in design.

The general goals inherent in this Urban Design Element are:

1. Building densities and designs which reflect the suburban character of the East Linda Specific Plan area.

2. Building form and layout which emphasizes architectural harmony in detail, materials, landscaping and signage within an individual project and within the larger community.

3. A built-out environment that minimizes disruption of existing natural features and blends with the natural environment and topography.

4. Integration of the built environment and open space systems to enhance living and working spaces.

5. Maximum potential for energy conservation through building design and landscape designs which recognize the climatic conditions in the area.

6. High quality and aesthetically superior development.

7. Safety and convenience for all residents and visitors in the Plan area.

8.1 Architecture (Building Form and Style)

The architectural aspect of these design guidelines is intended to provide a general guideline for architectural approach rather than strict design standards. It is recognized that architecture is a subjective matter open to broad interpretation. Consequently, design directives that would specify the use of certain materials or forms is not appropriate. However, the climate, the most outstanding feature of which is the typically hot, sunny summer, suggests that adherence to basic design guidelines is in order for all buildings within the Plan area. These include:

1. Use of broad overhangs to shelter and shade walls of buildings, notably on the west and south facing sides.

2. Use of materials that will withstand the extreme seasonal variation in temperatures that occur in the area.

3. Use of light-colored building materials and finishes that complement the sense of open space and light that characterize the existing environment.

4. Use of stark white finishes and mirrored glazing is discouraged.

8.2 Landscape Guidelines

8.2.1 Street Landscaping

1. Street trees should be located along major thoroughfares to provide shade, foliage to soften the hard streetscape, and a canopy "ceiling" to help define a more intimate pedestrian scale, as illustrated in Figure 8-1, Landscape Corridors Plan. Although a variety of trees can survive as effective street trees, it is recommended that a dominant species of tree be used on a particular street for visual continuity and harmony.

2. Landscaped setbacks shall be created along all arterial streets to shield private spaces and help create a sense of unity along the street and within the community. Specific policies are listed in the Circulation Element, Section 4.

3. Landscaping should include mounding and berming as a means of adding visual interest.

4. Within neighborhoods, dominant street trees shall be planted to provide a canopy of shade. A minimum of one tree per lot shall be planted by the project developer. The use of planter strips between the curb and sidewalk is strongly encouraged to allow the planting of significant street trees and other landscaping, as well as provide a buffer between the pedestrian and automobile traffic. If planter strips are utilized, the County should consider reducing the building setback requirement if appropriate.

5. Drought tolerant plant species shall be used wherever possible.

6. Special paving treatment such as precast hexagonal pavers on concrete or sand, stamped concrete, or other suitable decorative surface should be used where special character paving emphasis is desired such as at crosswalks and intersection, and major entrances to residential, commercial or business-professional developments.

8.2.2 Open Space Corridor Landscaping

Open space corridors will occur primarily along drainage courses and within the powerline easement. These areas have been designated to remain as permanent open space. This network provides an excellent opportunity to blend the planned urban landscape with the natural landscape.

1. Increased runoff will require erosion control techniques which need to be integrated with the overall landscape design. Drainage channels should be preserved in their natural state wherever feasible, and incorporated into the overall landscape design of adjacent parks and pedestrian/bike trail systems.

2. Earthen berms shall be used as a land-use buffer where appropriate.

3. Open space/floodway corridors shall be accessible from residential and employment areas, with pedestrian/bicycle linkages provided as specified in the Circulation Element, Section 4, and the Open Space and Conservation Element, Section 5.

4. Multi-family housing or business park open spaces should be connected to the corridor or related paths where appropriate.

5. Tree plantings and other landscaping should be extended from the corridor into adjacent land use sites.

6. New planting should draw upon native species.

8.3 Lighting Guidelines

1. Exterior lighting shall be provided for safety and security as well as to enhance building design and landscaping.

2. Exterior lighting shall be designed and located so as not to create glare for project occupants or neighboring properties. Light fixtures shall be installed which project light downward only, not sideways or upwards, creating unnecessary light spillage and glare.

3. The style and design of lighting fixtures should be compatible and consistent with building design. For example, ornate Victorian style fixtures are not appropriate for contemporary office buildings or ranch style homes.

4. High pressure sodium vapor lights should be employed with cutoff-style fixtures to improve energy efficiency and reduce glare impacts.

Figure 8-1
Landscape Corridors Plan

8.4 Screening Guidelines

1. A six-foot solid masonry wall shall be provided along single family residential areas adjacent to arterials, and a six-foot solid wood fence with masonry pilasters adjacent to collector streets, to provide visual screens and acoustical barriers as illustrated in Figure 8-2, Arterial Landscape Illustration.

Figure 8-2
Arterial Landscape Illustration

2. No outside unscreened storage will be permitted in commercial, business-professional or multi-family residential land use areas. Loading, service, and trash enclosure areas shall be fully screened by a combination of masonry walls, grade separation, and/or dense landscaping.

3. Mechanical equipment, satellite dishes and similar structures shall be ground-mounted when practical. If not ground-mounted, such equipment must be screened from view of streets, adjacent properties and the general public through the use of parapet walls, roof wells or other means incorporated as an integral part of building design.

4. All new utility lines and connections shall be placed underground. Electrical transformers, terminal boxes, meters, fire risers, backflow preventers and other similar facilities shall be screened and oriented away from public view except as required by the County or other public agencies or utilities.

5. All screening, fencing and retaining walls shall be of compatible materials, color and texture with their related buildings.

6. All noise generating mechanical devices shall be located so that their potential as a nuisance to abutting properties is minimized. In addition to location as a noise mitigation measure, noise reduction walls and low noise emission products should be considered wherever feasible.

8.5 Sign Guidelines

The primary purpose of signage is to identify a particular business or use by name and/or function, but all too often, in an attempt to attract customers or advertise a business, signs have grown in size and number until they virtually overwhelm the urban landscape. The end result is a cluttered, visually unappealing community.

In general, signs should have a low profile, be subtle and unobtrusive and relate to their surroundings in terms of size, shape, color, texture and lighting so that they are complementary to the overall design of the buildings on which they are placed. All signs within individual residential projects, commercial centers and office complexes shall be coordinated. A comprehensive sign program shall be designed for all commercial or business-professional centers containing five or more individual tenants or businesses, and shall be submitted to the Yuba County Department of Planning and Building Services for review and approval. All other signs are subject to County Department of Planning and Building Services review as well, and shall require the necessary permits.

8.5.1 Residential Signs

1. Entry points into residential developments may be marked by monument-style identification signs. Such signs shall be the minimum size necessary to serve the intended purpose, and shall not exceed five (5) feet in height with a maximum message area of twenty (20) square feet.

2. The use of natural materials such as wood, brick or stone for signage is encouraged, although metal lettering is permitted.

3. No plastic or interior illuminated signs are permitted.

8.5.2 Commercial Signs

1. One (1) freestanding monument-style sign is permitted for each commercial center having frontage along a public roadway. The sign shall indicate the name of the center only, and shall be constructed of similar materials and architectural theme as the building it identifies. The sign shall have a maximum height of eight (8) feet. The total message area permitted shall be equal to one (1) square foot of sign area for each lineal foot of lot frontage along the street, not to exceed one hundred (100) square feet.

2. Each business within a commercial building or center may have a wall sign, awning sign or window sign, or any combination of the three. The maximum allowable sign area shall be calculated as follows:

a. For single-tenant businesses located in a free standing building, the maximum allowable sign area shall be equal to two (2) square feet of sign for each lineal foot of building frontage, not to exceed one hundred (100) square feet.

b. For businesses located in a building or center having two (2) to four (4) tenants, the maximum allowable sign area for each business shall be equal to one and one half (1.5) square feet of sign for each lineal foot of building frontage of each tenant space. No single sign shall exceed sixty (60) square feet in area.

c. For business located in a building or center having five (5) or more tenants, the maximum allowable sign area for each business shall be equal to one (1) square feet of sign for each lineal foot of building frontage of each tenant space. No single sign shall exceed thirty (30) square feet in area.

3. Commercial signs may be of wood, metal, stone, neon or plastic. Individual channel letters are encouraged, while interior illuminated cabinet signs are strongly discouraged.

4. Signs on the rear elevations of structures are prohibited, unless the building or business has a secondary entrance in the rear which faces a parking lot or public street.

5. Building signage shall be approved through site review and designed as an integral part of the building.

8.5.3 Business-Professional Signs

1. One (1) monument-style sign and one (1) wall sign is permitted for each building. The sign shall indicate only the name of the office building or the name of an anchor tenant, if that tenant occupies more than 50% of the leasable floor area.

2. The monument-style sign shall not exceed six (6) feet in height nor thirty (30) square feet in message area, and shall be constructed of similar materials and theme as the building it identifies. Interior illuminated monument signage is discouraged.

3. Wall signs shall be equal to one (1) square foot of sign area for each lineal foot of building frontage along a roadway, up to a maximum of thirty (30) square feet, and may be wood, metal, stone, neon or plastic. Individual channel letters are encouraged, while interior illuminated cabinet signs are strongly discouraged.

8.5.4 Temporary Signs

A temporary sign is permitted for the identification of newly-opened businesses or special promotional activities for a period not to exceed thirty (30) days.

8.5.5 Prohibited Signs

Banners, pennants, streamers, balloons, A-frames, vehicle-mounted signage, roof-mounted signs, pole signs, animated or mechanical signs, painted signs, and off-site signs are prohibited, except for temporary banners, permitted under Section 8.5.4.

8.6 Artwork

The provision of fine artworks such as sculptures, murals, water elements, carvings, frescoes, mosaics and mobiles is encouraged. Such work should relate in terms of scale, form, and concept with the architecture and environment of the subject site. Artwork should be located to be visible and accessible to the public. Design of the artwork should be durable against vandalism and weather, and should not require excessive maintenance. The artwork is to be considered a permanent asset to the property.

9. NOISE ELEMENT

Noise is usually defined as unwanted, disturbing sound, and is an important consideration to be addressed in land use planning. Human response to noise is subjective and varies considerably from one individual to another, but the effects of noise can range from interference with sleep, concentration, and communication, to physiological and psychological stress and, at the highest intensity levels, hearing loss. The seriousness of any given sound is a combination of its intensity and duration, as well as time of day. Louder noises are perceived as acceptable if they last for shorter periods of time. Similarly, noise levels which may be considered to be acceptable during the day can be annoying or intolerable at night. This is especially true for residents living adjacent to highways or railroads, for example.

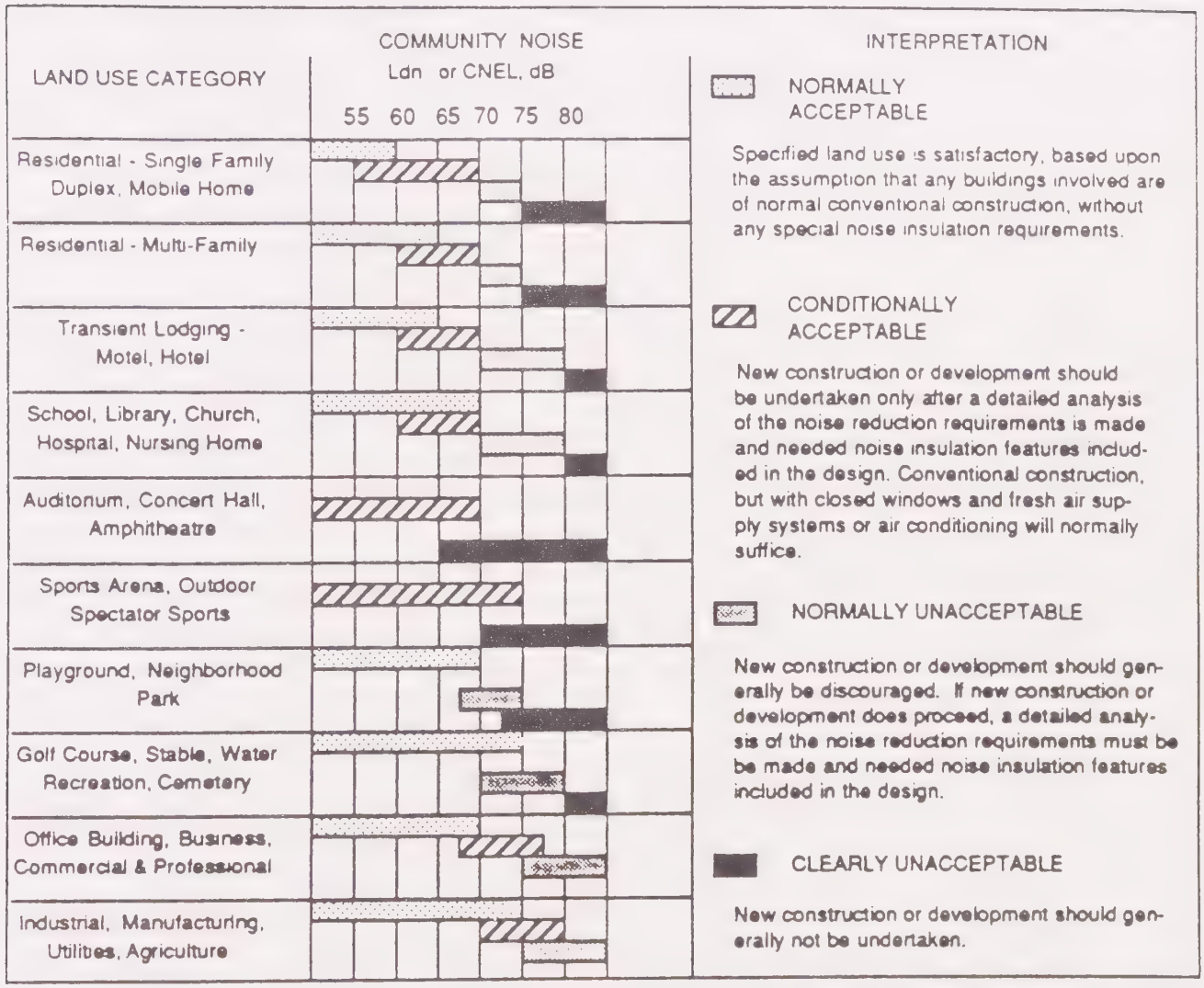
Several methods have been developed to measure sound and to describe noise intensity and fluctuation. The measuring unit "decibel" (dB) is used to express the relative loudness of a sound (it actually measures the amplitude of sound pressure waves). The decibel scale ranges from zero, the threshold of hearing, to 140 dB and above, 140 dB being the threshold of pain. Because the human ear does not react to sound at low or extremely high frequencies (the number of sound pressure wave fluctuations per second), the quality of sound must also be evaluated. To approximate the sensitivity of the ear to different frequencies, sound is usually measured in A-weighted decibels (dBA).

Examples of noise levels associated with common situations, given in dBA, are listed below:

Jet takeoff at 200 feet	125 dBA
Indoor rock concert	115 dBA
Freight train at 50 feet	95 dBA
Freeway traffic at 50 feet	80 dBA
Vacuum cleaner	70 dBA
Typical office	50 dBA
Library	40 dBA
Broadcast or recording studio	20 dBA
Leaves rustling	10 dBA

The most commonly used scales to describe noise are L_{dn} and CNEL, both of which are weighted averages of daytime and nighttime sound levels to account for the greater sensitivity of humans to nighttime noise. L_{dn}, the day-night average noise level, is the 24-hour average of the noise intensity, with a 10 dBA "penalty" added for nighttime noise. CNEL, the community noise equivalent level, is similar to L_{dn}, but adds a 5 dBA penalty for nighttime noise. These methods are only useful to measure relatively

Land Use Compatibility Community Noise Environments



CONSIDERATIONS IN DETERMINATION OF NOISE - COMPATIBLE LAND USE

A. NORMALIZATION NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitable with respect to a "normalized" value of CNEL or L_{dn}. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated of CNEL or L_{dn}.

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposes do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which to encourage land compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located in Community Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn}. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Source: California Office of Noise Control

Figure 9-1

constant sounds such as traffic or train noise, however, because short term or intermittent loud noises may be underestimated by L_{dn} or CNEL. For the purposes of land use planning, however, these methods are appropriate.

Figure 9-1, Land Use Compatibility For Community Noise Environments, describes the compatibility of different land uses within a range of noise levels expected within a typical community. Some of the more noise-sensitive uses include churches, schools, libraries, auditoriums, theaters, sports arenas, and housing.

9.1 Noise Sources Within the Plan Area

The East Linda Specific Plan area is affected by a number of significant noise sources, nearly all related to different modes of transportation, including vehicular (from the various roadways and State Highway 70), railroads (Southern Pacific freight lines) and aircraft (from Beale Air Force Base and the Yuba County Airport). At present, the areas most affected by these noise sources are either undeveloped or developed at very low densities. As the Plan area is developed, however, there is the potential for a substantial number of residents to be negatively affected by noise impacts, especially those resulting from the proposed State Highway 70 Bypass.

9.1.1 Vehicular Sources

Vehicular traffic, including autos, trucks, buses, motorcycles, and utility vehicles, generally establish the ambient sound (normal background sounds) in a community. This ambient level varies throughout the day based on the intensity of other community sound sources, and is dependent upon traffic flow rate, average vehicular speed, distance to sound receivers and the ratio of types of vehicles (Yuba County General Plan Noise Element, 1980, p. 21). In general, the higher the speed and level of traffic, the higher the noise level will be. Thus, freeways, highways and major arterials are significantly noisier than local streets.

Within the Specific Plan area, there will be a number of significant vehicular noise sources, including the existing Highway 70, the proposed Route 70 Bypass, and the major arterials of North Beale Road, Erle Road, Dantoni Road and Hammonton Smartville Road. In addition, some of the minor roadways such as Griffith Avenue, which are fronted by single family dwellings built fairly close to the pavement, present noise problems for residents living on those roads as well. Griffith Avenue already experiences noise impacts because it is sometimes used by drivers of large trucks and semis as a shortcut to Erle Road, and a sizable number of the homes along Griffith are built within 10 to 20 feet of the roadway.

The Plan area is criss-crossed by these highways and arterials, thus a sizable portion of the area will be impacted by vehicular noise sources. Because there is a limited market for commercial and industrial uses, a large percentage of the land uses will be residential, one of the more noise-sensitive. Therefore, care must be taken in the siting and buffering of dwelling units adjacent to major roadways.

Of special concern is the proposed Route 70 Bypass, which will pass through a largely residential area. Along much of the length of the Bypass, however, residential densities are low, generally three to four dwelling units per acre. This large-lot single family development will not only reduce the number of people impacted by highway noise, but will also allow for deeper lots, permitting the dwelling unit to be set back 50 feet or more from the highway right-of-way, thereby reducing the noise impact. In the case of multi-family residential development, special noise insulation features can be designed into a project at a relatively lower cost per unit. Also, buildings can be sited to mitigate noise impacts; garages or carports and driveways can be placed nearest to the highway, allowing the residential units to be set back a greater distance.

In addition to the spatial arrangement of land uses, there are a number of measures which can be implemented to adequately buffer noise-sensitive land uses from effects of highway noise. The Plan contains policies intended to protect the integrity of new and existing residential neighborhoods and other noise-sensitive uses, and to ensure proper design and use of adequate noise-insulating building materials. These policies are contained in several of the Plan elements including this element (Section 9.2), as well as Land Use, Circulation and Urban Design.

9.1.2 Railroad Sources

The main tracks of the Southern Pacific Railroad run along the southwestern edge of the Plan area, and a secondary line runs along the northern edge. The tracks run along the tops of levees, elevated above the surrounding terrain and, as a result, noise from trains extends a greater distance than it would if the tracks were at ground level. These trains carry heavy freight traffic, with as many nighttime as daytime operations.

At present, the only development located adjacent to the rail lines is a mobile home park in the northern part of the Plan area. Business-professional uses and a neighborhood park are proposed for the southwest portion of the Plan area adjacent to the rail line. These uses will help buffer the residential neighborhoods from much of the railroad noise impacts. In the northern part of the Plan area, residential densities are relatively low, and the Plan contains policies to ensure adequate setbacks and noise buffering for dwellings located near the rail line.

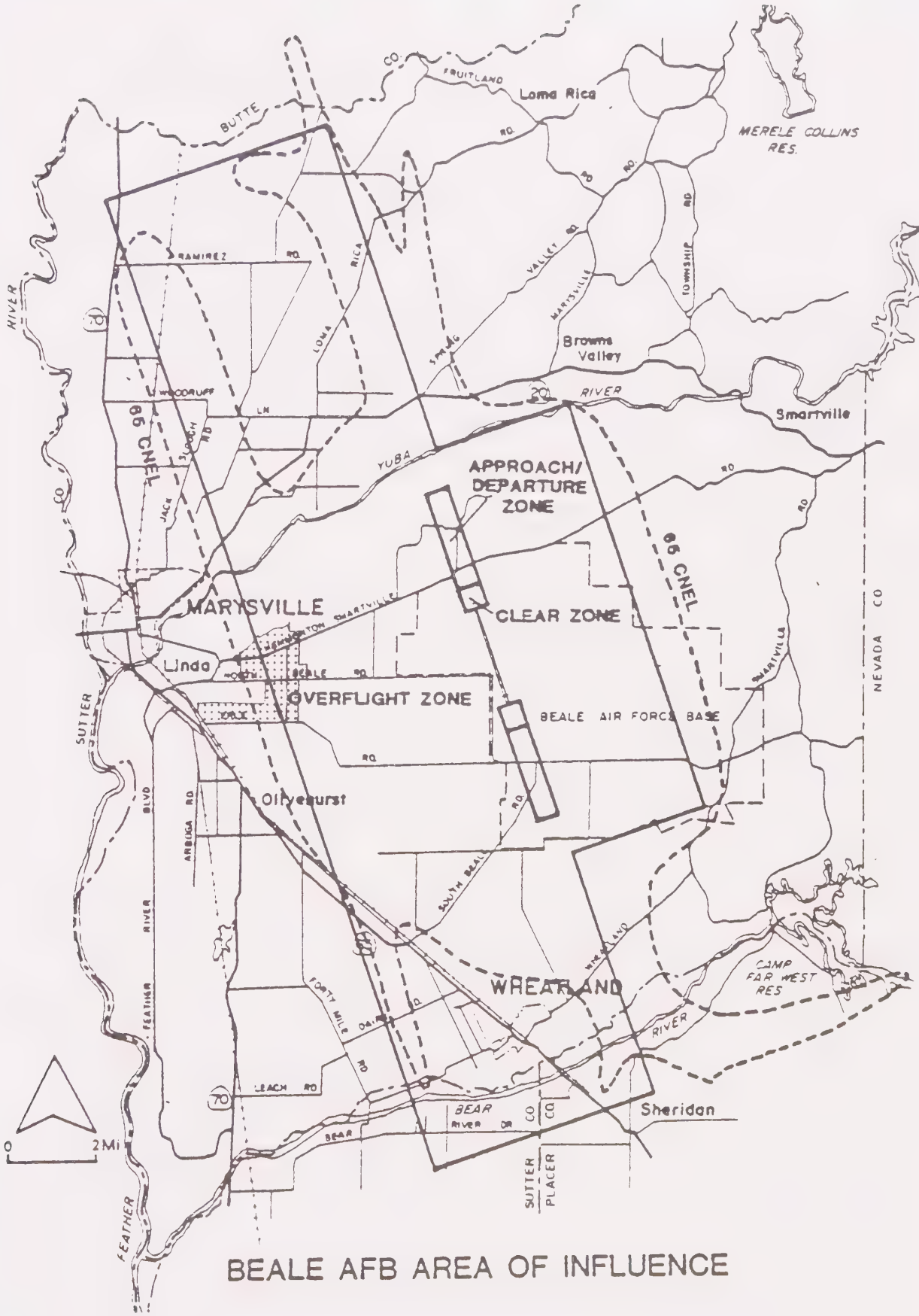
9.1.3 Aircraft Sources

Aircraft noise in the East Linda area is primarily due to Beale Air Force Base. The base has one active concrete runway which is 12,000 feet long and 300 feet wide, with asphalt overruns of 1,000 feet on the south and 2,250 feet on the north, and is capable of handling any aircraft in the Air Force Inventory (Beale Air Force Base Comprehensive Land Use Plan (CLUP), 1986, p. 5). The runway is located approximately four miles east of the eastern end of the Plan area. The greatest sound intrusion occurs when military jets land, take off, or run their engines while on the ground. During the years 1978 to 1985, annual aircraft operations at Beale AFB averaged 103,544 (Beale CLUP, p. 6).

Flying operations at Beale AFB are evaluated continuously to maintain noise levels at a minimum. Practice takeoff and landings and instrument approaches are normally conducted at times when people are not sleeping, and usually are not scheduled between 10:00 p.m. and 6:00 a.m. During evening hours, only mission-essential aircraft arrivals and departures occur. Also, traffic patterns are located away from population centers and normal run-up activities are not performed after 10:00 p.m. or before 6:00 a.m. (Beale CLUP, p.7).

The Beale CLUP was prepared to achieve the following goals: to protect Beale AFB from non-compatible land uses, and provide for the orderly growth of the area surrounding the base; to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general by protecting the public from the adverse effects of aircraft noise and reducing the number of people exposed to airport-related hazards; and, to ensure that no structures affect navigable space. The CLUP sets forth land use compatibility guidelines for noise and safety. Essentially, certain land uses are restricted from locations where the CNEL is greater than 65 decibels and/or where the property is within the Beale AFB Overflight zone, as shown in Figure 9-2, Beale AFB Area of Influence.

The Yuba County Board of Supervisors approved a General Plan Amendment (GPA 88-05) on December 27, 1988, incorporating the Beale CLUP into the County's General Plan Land Use Element. The Board subsequently amended the County Zoning Ordinance by adding the Beale Air Force Base Zone, thereby providing a mechanism for implementation of the Beale CLUP. Section 12.115.070 of the ordinance specifies that public assembly and public and quasi-public uses are not compatible in areas having a CNEL of 65 dB or greater. Within the East Linda Specific Plan, this means schools. Unfortunately, over two-thirds of the Plan area has a CNEL of 65 dB or greater and, if residential development is to occur, schools must be provided in relatively close proximity to the neighborhoods.



BEALE AFB AREA OF INFLUENCE

Figure 9-2

The noise resulting from military aircraft is intermittent and fairly infrequent, unlike that from a highway or busy arterial. With proper construction techniques and noise-reduction features, intermittent noise impacts can be mitigated to an appreciable degree.

A second source of aircraft noise is Yuba County Airport, a general aviation facility with no scheduled airline service at the present time. The airport has experienced increased civil, military, air carrier, and air taxi aircraft operations at the average rate of approximately 10 percent per year (Yuba County Noise Element, 1980, p. 31). The airport is located about one mile from the southwest corner of the Plan area, which is planned for light industrial and business professional uses. The airport flight path is such that the major noise impacts are confined to west Linda and portions of Olivehurst, therefore there has not been, nor is there likely to be, a significant noise impact to the East Linda Specific Plan area.

9.2 Noise Mitigation Policies

1. New development of residential or other noise sensitive land uses in noise-impacted areas (along major arterials, railroads or the Route 70 Bypass) shall incorporate mitigation measures into the project design to reduce noise levels to 60 dB (CNEL) or less in outdoor activity areas, and to 45 dB (CNEL) or less indoors with the windows and doors closed. An acoustical analysis shall be prepared for these projects to ensure that an acceptable interior noise level of 45 dB (CNEL) or less will be achieved. In accordance with the Uniform Building Code, Chapter 35, common wall and floor/ceiling assemblies within multi-family dwellings shall comply with minimum standards concerning the transmission of airborne sound and structure-borne impact noise.

2. New single family dwelling units constructed in areas having an airport-caused noise level of 65 dB or greater (CNEL) shall be constructed in such a manner so that the interior noise level does not exceed 45 dB.

3. New multi-family dwelling units, hotels, and motels constructed in areas having an airport-caused noise level of 60 dB or greater shall be constructed in accordance with the noise reduction requirements set forth in the California Administrative Code, Title 24 (refer to Policy 1 above).

4. New single-family dwelling units developed at densities of three units per acre or less which are located adjacent to the proposed Route 70 Bypass shall be set back a minimum of 100 feet from the Bypass right-of-way.

5. New single- family dwelling units developed at densities of four units per acre or more which are located adjacent to the Bypass shall be set back a

minimum of 50 feet from the Bypass right--of-way, and shall be separated from the Bypass by a six foot high solid block or masonry wall.

6. Where feasible, earth berms should be incorporated into the design of noise reduction barriers in order to lessen the effects of the wall. In any case, the maximum height of a solid wall shall not exceed six feet, and the total height of the noise barrier (wall and berm combined) shall not exceed 12 feet, as measured at the roadway level.

7. In new multi-family residential developments, garages, carports, driveways and landscaped open space shall be placed on the portions of the site adjacent to arterial streets or other vehicular noise sources in order to buffer the dwelling units from noise impacts.

APPENDIX A
Jobs Within East Linda Commute Shed

Employment Area/Distance	Acres	Employees per Acre	Employees
0-5 Miles			
Yuba County Airport Industrial Park	265	8.5	2,250
Yuba City area industrial zones	268	8.5	2,280
Yuba County commerical (Marysville, Linda, Olivehurst)	500	20.0	10,000
South Linda Industrial area	670	8.5	5,700
Yuba City commercial	250	20.0	5,000
Yuba City Mall	40	30.0	1,200
Other (Hospitals, Schools, Government)			5,000
Total 0-5 Miles			31,430
5-10 Miles			
Beale Air Force Base			7,500
Other Yuba County Industrial	1,000	8.5	8,500
West Yuba City Industrial	784	8.5	6,600
Yuba/Sutter Agriculture			1,000
Total 5-10 Miles			23,600
Total 0-10 Miles			55,030
10-20 Miles			
North Lincoln (Airpark, Foskett)	400	11.7	4,700
Total 10-20 Miles			4,700
Total 0 -20 Miles			59,730
20-30 Miles			
Lincoln	462	23.7	10,950
North Roseville/Placer Lakes	4,399	14.5	63,800
Rocklin/Sunset Ranchos	1,289	11.9	15,380
Sunset Industrial Park	600	7.0	4,200
Total 20-30 Miles			94,330
Total 0 -30 Miles			154,060
30-40 Miles			
South/East Roseville/Loomis	1,018	16.2	16,463
Antelope	90	26.3	2,366
North Natomas			67,000
North Sacramento/McClellan AFB			24,000
Total 30-40 Miles			109,829
Total 0-40 Miles			263,889

Sources: Wade Associates; City of Roseville, "South Placer Employee Survey", 1987; City of Rocklin, "Development Activity Report", 1989; Yuba County General Plan Land Use Element, 1981; City of Sacramento, North Natomas Community Plan.

APPENDIX B
Vehicle Trip Generation Rates By Land Use Type

Land Use	Units/ Acre	Average Daily Traffic Generated Per Unit	ADT/ Acre	P.M. Peak Hour Traffic Trips/Acre
I. Residential				
RRE	0.5 D.U.	10	5	0.55
R-1	1.0 D.U.	10	10	1.10
R-2	2.0 D.U.	10	20	2.20
R-3	3.0 D.U.	10	30	3.30
R-4	4.0 D.U.	10	40	4.40
R-4.5	4.5 D.U.	10	45	5.00
R-5	5.0 D.U.	10	50	5.70
R-7	7.0 D.U.	8	56	6.20
R-8	8.0 D.U.	8	64	7.00
R-9	9.0 D.U.	8	72	7.90
R-10	10.0 D.U.	8	80	8.80
R-12	12.0 D.U.	7	84	9.20
R-15	15.0 D.U.	7	105	11.60
R-18	18.0 D.U.	7	125	13.90
R-20	20.0 D.U.	7	140	15.40
Mobile Home	7.5 D.U.	5	37.5	4.10
II. Bus/Comm.				
Bus. Prof.	1.0 Acre	300	300	30
Commercial	1.0 Acre	700	700	70
BP/Comm.	1.0 Acre	500	500	50
BP/Light Ind.	1.0 Acre	200	200	25
III. Other				
Parks	1.0 Acre	5	5	0.5
Rec./Floodway	1.0 Acre	5	5	0.5
Elem. Sch.	1.0 Acre	60	60	3.0
Jr. High Sch.	1.0 Acre	40	40	2.8
High Sch.	1.0 Acre	50	50	2.6
Library	1.0 Acre	400	400	52.0

Source: Lowell & Associates, Transportation and Traffic Engineering Handbook, 1982 Edition.

APPENDIX C
Domestic Water Use Generation Rates by Land Use Type

Proposed Land Use	Units/ Acre	Average Daily Flow Generated Per Unit-Gallons	ADF/Acre Gal/Day/Ac	ADF Ratio	Peak Flow Peak Gal/Day/Acre
I. Residential					
RRE	0.5 D.U.	522	261	2.3	600
R-1	1.0 D.U.	522	522	2.3	1201
R-2	2.0 D.U.	522	1044	2.3	2401
R-3	3.0 D.U.	522	1566	2.3	3602
R-4	4.0 D.U.	522	2088	2.3	4802
R-4.5	4.5 D.U.	522	2349	2.3	5403
R-5	5.0 D.U.	522	2610	2.3	6003
R-7	7.0 D.U.	414	2898	2.3	6665
R-8	8.0 D.U.	414	3312	2.3	7618
R-9	9.0 D.U.	414	3726	2.3	8570
R-10	10.0 D.U.	342	3420	2.3	7866
R-12	12.0 D.U.	342	4104	2.3	9439
R-15	15.0 D.U.	342	5130	2.3	11799
R-18	18.0 D.U.	342	6156	2.3	14159
R-20	20.0 D.U.	342	6840	2.3	15732
Mobile Home	7.5 D.U.	414	3105	2.3	7141
II. Bus/Comm.					
Bus. Prof.	1.0 Acre	2200	2200	2.3	5060
Commercial	1.0 Acre	3600	3600	2.3	8280
BP/Comm.	1.0 Acre	2900	2900	2.3	6670
BP/Light Ind.	1.0 Acre	2900	2900	2.3	6670
III. Other					
Parks	1.0 Acre	3500	3500	2.3	8050
Rec./Floodway	1.0 Acre	2000	2000	2.3	4600
Elem. Sch.	1.0 Acre	1500	1500	2.3	3450
Jr. High Sch.	1.0 Acre	2200	2200	2.3	5060
High Sch.	1.0 Acre	2800	2800	2.3	6440
Library	1.0 Acre	1500	1500	2.3	3450

Source: Kennedy/Jenks/Chilton, "Final Report Water System Master Plan", January 1988.

APPENDIX D
Sewage Flow Generation Rates By Land Use Type

Proposed Land Use	Units/ Acre	Average Daily Flow Generated Per Unit-Gallons	ADF/Acre Gal/Day/Ac
I. Residential *			
RRE	0.5 D.U.	290	145
R-1	1.0 D.U.	290	290
R-2	2.0 D.U.	290	580
R-3	3.0 D.U.	290	870
R-4	4.0 D.U.	290	1160
R-4.5	4.5 D.U.	290	1305
R-5	5.0 D.U.	290	1450
R-7	7.0 D.U.	230	1610
R-8	8.0 D.U.	230	1840
R-9	9.0 D.U.	230	2070
R-10	10.0 D.U.	190	1900
R-12	12.0 D.U.	190	2280
R-15	15.0 D.U.	190	2850
R-18	18.0 D.U.	190	3420
R-20	20.0 D.U.	190	3800
Mobile Home	7.5 D.U.	230	1725
II. Bus/Comm.			
Bus. Prof.	1.0 Acre	1200	1200
Commercial	1.0 Acre	2000	2000
BP/Comm.	1.0 Acre	1600	1600
BP/Light Ind.	1.0 Acre	1600	1600
III. Other			
Parks	1.0 Acre	300	300
Rec./Floodway	1.0 Acre	0	0
Elem. Sch.	1.0 Acre	750	750
Jr. High Sch.	1.0 Acre	1200	1200
High Sch.	1.0 Acre	1400	1400
Library	1.0 Acre	500	500

*Residential flows are based on
100 gallons per day per person.

Source: Kennedy/Jenks/Chilton; "Final Report Water System Master Plan; January 1988